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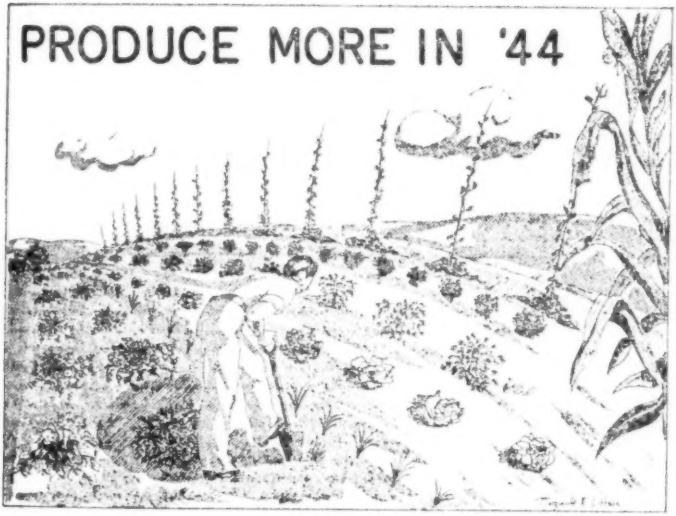


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# MONTHLY LABOR REVIEW

FOR AUGUST 1944

## Intercity Variations in Wage Levels[1]

### *Summary*

EXAMINATION of wage statistics for American cities of 250,000 population or more reveals striking differences in the rates of pay for identical or closely similar work. These differences may reflect differences in the productivity of labor or management, the influence of unionization, the temporary result of abrupt industry shifts, or a variety of other factors. Although the relative wage level of an area varies somewhat according to the occupation considered, there is sufficient consistency in the wage rates of most areas to permit their classification as high-wage or low-wage, or in some intermediate position.

In the present article wage data for 26 manufacturing and 9 nonmanufacturing occupational classifications have been analyzed to discover the relative general wage levels of 31 large urban areas. In order to discount the influence of varying industrial composition among these areas, identical occupations with uniform weights were studied in all areas. The manufacturing occupations were drawn largely from the metalworking industries, while financial institutions and power laundries account for 5 of the 9 nonmanufacturing jobs. Since these industries are not equally representative of all areas, the wage levels indicated should be recognized as rough approximations.

On the basis of evidence presented here, Detroit and Seattle appear to maintain the highest wages among the areas studied, the former ranking first in manufacturing occupations and the latter first in nonmanufacturing. Other areas in which wage rates are 10 percent or more above the general average for both groups of occupations are San Francisco, Portland, and Cleveland. Atlanta, Dallas, Birmingham, San Antonio, Memphis, and New Orleans appear to be the lowest-wage urban areas; although it has been possible to rank five of these six areas with respect to only one of the two occupational groups, the low level of their wage rates is confirmed by information from other sources. Houston and St. Louis are also at least 10 percent below the average for both groups. Both in manufacturing and in nonmanufacturing the level of wages in the highest-wage areas is almost twice as high as in the lowest-wage area.

[1] Prepared by Louis M. Solomon of the Bureau's Division of Wage Analysis. The general method used in this article was outlined by the Division's planning committee, and the statistical material was compiled under the direction of Joseph H. Mayer.

Most of the remaining areas pay wages somewhere near the average either in manufacturing or in nonmanufacturing, or in both. The wage levels of some of these areas, in fact, are clustered within so narrow a range that a variation of only a few percentage points would change the rank of the area by 5 or 6 places.

Areas in which the pay is higher than average but less than 110 percent of the average for one or both groups are Toledo, Pittsburgh, Philadelphia, Los Angeles, and Milwaukee. It is probable that New York City would fall in this class if sufficient data were available to permit classification. Wage rates in Indianapolis, Minneapolis-St. Paul, Cincinnati, and Washington (rated only in private nonmanufacturing) appear to be about average. Columbus, Baltimore, Louisville, and Boston are relatively low-wage areas, but surpass 90 percent of the average for one or both occupational groups. Denver, for which nonmanufacturing wage data alone are available, pays wages about 10 percent below the average and should probably be added to this group of cities. Buffalo and Chicago, which pay about average wages in manufacturing, pay relatively high wages in nonmanufacturing jobs. Kansas City pays average wages in manufacturing but somewhat lower wages in nonmanufacturing, while Providence wage levels are below the average for the first group and slightly above for the second.

## *Purpose and Scope of Study*

Intercity differences in wage rates play an important part in the economic life of the Nation. They are a vital concern of the war worker seeking the most advantageous market in which to sell his services, of the manufacturer considering the expansion or relocation of his facilities, of the Federal agency faced with responsibility for determining or stabilizing wage rates, and of other groups to which wages represent a source of income or an item of expense.

It is not, of course, to be expected that wage rates should be uniform in all parts of the United States. The labor available in some communities is more efficient than that in others. Changes in the localization of industry, such as those associated with the war production program, create labor shortages in some communities and leave surpluses in others. The level of wage rates is also influenced by local differences in the extent of unionism, the regularity and security of employment, alternative opportunities for earning a living, the cost of consumer goods, the availability of capital equipment, the efficiency of management, and other factors. To some extent, therefore, geographic variations in wage rates may serve merely to offset differences in the productivity of labor or the attractiveness of employment. Wage differences also help to induce workers to move from the trades and localities in which surpluses exist to those in which labor is scarce. Other differences reflect the influence of monopolistic forces, while still others are largely fortuitous.

The purpose of the present study was to achieve an approximate classification of the major American cities with respect to the relative levels of their wage rates, and to indicate roughly the extent of existing wage differences. Previous studies by the Bureau of Labor Statistics and tabulations of census data have shown the existence of broad regional variations in wages, and a few studies—particularly those of

common-labor entrance rates and of union rates in certain highly organized trades—have provided detail by individual city. The information now available, however, is superior to material previously assembled both as to scope and accuracy of classifications employed.

The material on which the rankings of the respective urban areas are based consists of average hourly rates or straight-time hourly earnings of experienced workers employed at specific jobs. The rankings consequently reflect variations in hourly wage rates as they are ordinarily conceived by employers and workers. Obviously they do not measure differences in weekly or annual incomes, since they take no account of hours worked or of supplementary income. They are deficient as measures of labor cost in so far as they fail to reflect differences in labor productivity and certain other items.

The study included 31 urban areas centering in cities with a population of 250,000 or more. It therefore covered most of the larger cities of the United States, although a few, including New York City, were omitted because of lack of sufficient basic materials.[2] Most of the areas studied include suburbs or other neighboring cities in which wage levels have been found to approximate those of the central city. Twenty-four of the areas covered have been ranked according to their wage levels in both manufacturing and nonmanufacturing industries. Two additional areas have been ranked with respect to their manufacturing wage levels only, and five have been ranked only with respect to their wages in nonmanufacturing. The wage data relate primarily to the spring and summer of 1943.

## *Method of Analysis*

Outlined briefly, the steps involved in determining the relative wage levels of the urban areas were as follows: (1) Standard lists of occupations (one for manufacturing and one for nonmanufacturing) were selected to represent the wage levels of all areas; (2) the average wage rate paid in each occupation in each area was determined from tabulations already at hand; (3) the respective averages for each occupation were combined into a composite occupational average for all areas, using as weights the estimated number of employees in that occupation in each area; (4) the average rate for each occupation in each area was expressed as a percentage of the composite occupational average; (5) the resulting series of relatives for each area were then combined into general index numbers for manufacturing and nonmanufacturing separately, the relative for each occupation being weighted in proportion to the estimated number of workers in that occupation in all areas combined; (6) for convenience in interpretation, these index numbers were then adjusted so that the simple average for all areas would equal 100; as an additional step (7) each area was ranked according to its wage rate for each separate occupation, and average ranks (unweighted) were then determined for each city for comparison with the index numbers described above.

[2] Other than New York City, the only places of 250,000 or more omitted in this study are Newark, Jersey City, Omaha, and Rochester. Oakland, Calif., is included in the San Francisco wage area.

### SELECTION OF OCCUPATIONS

The following factors were taken into consideration in the selection of occupations: (1) Definitiveness, i. e., distinctiveness and ease of classification, (2) frequency in the areas covered, (3) numerical importance, (4) prevalence of payment by the hour, day, or week, (5) sensitivity of wage rates to economic influences, and (6) representativeness of various skill and wage levels. These criteria, especially the second, proved to be very restrictive and, although applied with some flexibility, greatly limited the number of jobs suitable for consideration. Certain suitable jobs, moreover, in industries such as building construction, and public utilities, were not generally included in the locality wage surveys.[3]

The list finally selected included 26 occupational groups representative of manufacturing industries and 9 representative of nonmanufacturing. Twenty of the jobs in manufacturing, however, represented various branches of the metal trades, a fact which must be taken into consideration in interpreting the results of the analysis. Three represented the food industries (bakeries) and three (janitors, janitresses, and hand truckers) a variety of industries. Two of the nonmanufacturing occupations represented financial institutions; three, power laundries; and four, a variety of industries. The selected occupational groups and the respective weights used are presented in table 1.

TABLE 1.—*Occupational Groups, Weights, and Average Hourly Wage Rates Used in Constructing Composite Index Numbers of Wage Rates*

| Occupation, class, and sex | Weight | Average hourly wage rates [1] |
|---|---|---|
| *Manufacturing* | | |
| **Manufacturing, total** | **100.0** | |
| **Metalworking:** | | |
| Assemblers, bench: | | |
| Class A, male | 3.8 | $1.13 |
| Class B, male | 7.2 | 1.00 |
| Class C, male | 6.1 | .85 |
| Class B, female | 3.8 | .87 |
| Class C, female | 17.5 | .68 |
| Coremakers, hand, bench: | | |
| Class A, male | 1.8 | 1.22 |
| Class B, male | 1.1 | 1.10 |
| Drill-press operators, single spindle: | | |
| Class A, male | 1.0 | 1.09 |
| Class B, male | 2.3 | .95 |
| Class C, male | 2.6 | .84 |
| Class C, female | 2.5 | .72 |
| Electricians, maintenance: | | |
| Class A, male | 2.2 | 1.25 |
| Class B, male | 1.2 | 1.03 |
| Engine-lathe operators: | | |
| Class A, male | 4.0 | 1.22 |
| Class B, male | 4.7 | 1.06 |
| Class C, male | 2.7 | .95 |
| Class C, female | .9 | .85 |
| Shake-out men (foundry), male | 2.6 | .87 |
| Tool and die makers: | | |
| Class A, male | 6.7 | 1.48 |
| Class B, male | 2.9 | 1.23 |
| Food products: | | |
| Bakers, all-round (bench hands), male | 1.4 | $1.02 |
| Bread wrappers: | | |
| Male | .4 | .79 |
| Female | .2 | .61 |
| Miscellaneous industries: | | |
| Janitors: | | |
| Male | 10.8 | .75 |
| Female | 1.1 | .71 |
| Truckers, hand, male | 8.5 | .73 |
| *Nonmanufacturing* | | |
| **Nonmanufacturing, total** | **100.0** | |
| Financial institutions: | | |
| Paying and receiving tellers: | | |
| Male | 8.8 | 1.06 |
| Female | 4.5 | .73 |
| Power laundries: | | |
| Feeders, catchers, and shakers (flatwork), female | 32.2 | .69 |
| Markers, female | 10.5 | .65 |
| Washers, male | 4.0 | .78 |
| Miscellaneous industries: | | |
| Elevator operators, passenger: | | |
| Male | 10.2 | .66 |
| Female | 6.0 | .62 |
| File clerks, class B, female | 11.0 | .81 |
| Switchboard operators, female | 12.8 | .88 |

[1] Weighted average representing areas covered by study; wage rates as of spring and summer of 1943.

[3] Shipbuilding, airframe assembly, and the basic iron and steel industry were purposely excluded from the data analyzed in this article because they are not found in all of the areas. In many areas, however, these industries greatly influence the level of local wage rates.

### AVERAGE WAGE RATES

The average hourly rates for the respective occupational groups in each area were established on the basis of wage studies conducted by the various regional offices of the Bureau during the spring and summer of 1943. The primary purpose of these studies was to provide information for use by the War Labor Board in administering the wage-stabilization program.

In some cases the rates used represented combinations of data for industry branches which are usually presented separately by the Bureau. Thus, the foundry occupations cover both ferrous- and nonferrous-metal foundries; some of the other metalworking occupations represent combinations of data for machinery factories and ordnance plants; the jobs of janitor and hand trucker are found in many industries, etc. In consequence, although the same jobs have been used to represent every area, the influence of varying industrial composition has not been entirely eliminated.[4] The industry branches actually covered in the particular localities are, for the most part, the dominant industries in which the occupations are found. With respect to size of establishment, unionization, and similar factors, the wage rates used for each occupation are generally representative of establishments in the respective communities.

The selected occupational groups are, of course, more representative of some areas than of others. Industries of considerable importance in individual cities—for example, grain milling in Minneapolis and petroleum refining in Houston—have little direct representation here. The index numbers and rankings should consequently be considered only as rough and ready measures of relative wage levels, and recognized as subject to a considerable margin of error.

## *Wage Levels in Manufacturing Industries*

Index numbers and rankings for each of the 31 areas are presented in table 2. Data appear for both manufacturing and nonmanufacturing industries, but because of the differences in wage levels in these two broad industrial segments they will be discussed separately.

The indexes of manufacturing wage rates reveal that Detroit (index 131) ranks first among the 26 areas for which an index is given. Neighboring Toledo, competing in some occupations for the same labor supply, ranks second (127), Portland third (117), and Seattle fourth (116). Atlanta, with an index of 70, ranks last, while rates in Dallas (76) and Birmingham (78) are only slightly higher.

Examination of these data reveals no consistent variation by size of central city,[5] but regional differences are marked. These reflect the customary regional pattern shown by earlier wage surveys of the Bureau. In general, the highest wage levels are found on the Pacific Coast, reflecting in part the increasingly important industrial role played by Pacific Coast cities and their effort to attract additional labor. All of the 4 areas in this region are included among the highest 10, although the index for Los Angeles (103) is considerably lower

[4] Because of the industry combinations that have been made, the actual wage rates for the occupations covered in each city are not entirely suitable for collective-bargaining or wage-stabilization purposes and are not presented in this article. The basic wage material will be supplied to interested persons, however, on application to the Bureau.

[5] This is probably due to the fact that the cities covered are few in number and the range in size relatively narrow. Other studies by the Bureau have demonstrated a strong tendency for wage rates to increase with size of city.

than those for the other 3 areas. The Great Lakes areas are also represented by relatively high index numbers, 3 of the 6 approximately equaling and 3 substantially exceeding the average for the 26 areas combined. Collective agreements with labor unions are common in all of the highest ranking areas, and all of these areas are centers of heavy industry.

TABLE 2.—*Indexes and Rank of 31 Urban Areas, by Level of Wage Rates in Selected Occupations, Spring–Summer of 1943*

| Area | Indexes (average, all areas =100) | | Rank of area, based on index [1] | | Area | Indexes (average, all areas =100) | | Rank of area, based on index [1] | |
|---|---|---|---|---|---|---|---|---|---|
| | Manufacturing | Nonmanufacturing | Manufacturing | Nonmanufacturing | | Manufacturing | Nonmanufacturing | Manufacturing | Nonmanufacturing |
| Detroit, Mich. | 131 | 116 | 1 | 4 | Columbus, Ohio | 98 | 95 | 16 | 19 |
| Toledo, Ohio | 127 | 104 | 2 | 11 | Minneapolis-St. Paul, Minn. | 98 | 100 | 16 | 17 |
| Portland, Oreg. | 117 | 121 | 3 | 3 | Baltimore, Md. | 94 | 93 | 18 | 20 |
| Seattle, Wash. | 116 | 136 | 4 | 1 | Denver, Colo. | (2) | 90 | (2) | 21 |
| San Francisco, Calif | 114 | 135 | 5 | 2 | Louisville, Ky. | 92 | 86 | 19.5 | 24 |
| Pittsburgh, Pa. | 113 | 105 | 6 | 10 | Providence, R. I. | 92 | 102 | 19.5 | 13.5 |
| Cleveland, Ohio | 111 | 110 | 7 | 8 | Houston, Tex. | 90 | 83 | 21 | 25 |
| Philadelphia, Pa. | 107 | 103 | 8 | 12 | St. Louis, Mo. | 87 | 88 | 22 | 22.5 |
| Los Angeles, Calif. | 103 | 114 | 9 | 6 | Boston, Mass. | 86 | 100 | 23 | 17 |
| Milwaukee, Wis. | 102 | 106 | 10 | 9 | Birmingham, Ala. | 78 | (2) | 24 | (2) |
| Indianapolis, Ind. | 101 | 100 | 11 | 17 | Dallas, Tex. | 76 | 80 | 25 | 26 |
| Kansas City, Mo. | 100 | 88 | 12 | 22.5 | New Orleans, La. | (2) | 73 | (2) | 27 |
| Buffalo, N. Y. | 99 | 115 | 13.5 | 5 | Memphis, Tenn. | (2) | 72 | (2) | 28 |
| Chicago, Ill. | 99 | 112 | 13.5 | 7 | Atlanta, Ga. | 70 | (2) | 26 | (2) |
| Washington, D. C. | (2) | 102 | (2) | 13.5 | San Antonio, Tex. | (2) | 70 | (2) | 29 |
| Cincinnati, Ohio | 98 | 101 | 16 | 15 | | | | | |

[1] In cases where 2 or more cities have the same index, the rank given represents the average of the ranks in which they would fall; i. e., 13.5 is the average of ranks 13 and 14, 16 is the average of ranks 15, 16, and 17, etc.

[2] Data not available.

In the Midwest, except in the vicinity of the Great Lakes, the range is extremely narrow, all of the cities except St. Louis (87) having index numbers from 98 to 101, inclusive. The eastern areas rank relatively low, except for Pittsburgh (113) and Philadelphia (107).[4] New England has long been recognized as a relatively low-wage region and the index numbers for Boston (86) and Providence (92) support this designation. In general, however, the lowest index numbers represent southern cities.

The extreme range of these index numbers is noteworthy. The index for Detroit is nearly twice as high as that for Atlanta, and, although these figures may exaggerate or understate the amount of the difference somewhat, there can be no doubt that it is very great. Reference to the basic data, for example, reveals that the hand truckers included in the Bureau's survey in the Georgia capital averaged 45 cents an hour, while those studied in Detroit averaged 94 cents. The respective rates for janitors were 36 cents and 90 cents. Male bench assemblers, class C, averaged 59 cents and $1.11, respectively. The relative difference was less pronounced, however, among skilled classifications. Thus, class A tool and die makers averaged $1.20 in the Atlanta area and $1.62 in the Detroit area. Class A bench assemblers averaged $1.07 and $1.32, respectively.

[4] The results of a number of Bureau studies suggest that wage levels in New York City are generally somewhat below the levels prevailing in Philadelphia with respect to manufacturing. Thus, common-labor entrance rates in manufacturing in the spring and summer of 1943 averaged 69.8 cents per hour in Philadelphia and 64.4 cents in New York City. In nonmanufacturing the relationship appears to be reversed, with wages in New York City slightly exceeding those in Philadelphia.

For the purpose of comparison with the cost of a family budget, measures of wage rates are less satisfactory than measures of weekly, monthly, or annual earnings. It is of interest to note, however, that the differences in wage rates disclosed by this study show but little relationship to differences in the retail-price level in the various central cities. Information regarding intercity differences in the cost of the same standard of living in the spring of 1943 is available for 21 of the 26 cities.[7] Of these, the price level was highest in San Francisco, followed by Detroit, Chicago, Cleveland, Boston, and Minneapolis. Kansas City was lowest, with Birmingham, Houston, Indianapolis, and Los Angeles only slightly higher. Costs in Atlanta were about the same as in Philadelphia. The lowest cost was only 14 percent below the highest.

## AVERAGE RANK OF AREAS

The index numbers presented in table 2 are of particular interest because they indicate roughly the *extent* of wage differences from area to area. A second type of comparison, which ranks the various areas without attempting to measure the extent of their differences, is presented in table 3. In arriving at this comparison all cities were first ranked in accordance with the level of wage rates in each occupational category separately. The series of rankings for each city resulting from this operation were then summarized in terms of a simple average and the final rank determined on the basis of that average.

TABLE 3.—*Comparative Rank of 26 Urban Areas, by Level of Wage Rates in Selected Manufacturing Occupations, Spring–Summer of 1943*

| Area | Index | Average rank | Rank of area[1] | | Area | Index | Average rank | Rank of area[1] | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Based on index | Based on average rank | | | | Based on index | Based on average rank |
| Detroit | 131 | 2.5 | 1 | 1 | Cincinnati | 98 | 14.4 | 16 | 17 |
| Toledo | 127 | 4.2 | 2 | 2 | Columbus | 98 | 13.3 | 16 | 15 |
| Portland | 117 | 4.5 | 3 | 3 | Minneapolis–St. Paul | 98 | 12.5 | 16 | 12 |
| Seattle | 116 | 5.6 | 4 | 5 | Baltimore | 94 | 17.0 | 18 | 19.5 |
| San Francisco | 114 | 5.0 | 5 | 4 | Louisville | 92 | 16.1 | 19.5 | 18 |
| Pittsburgh | 113 | 7.5 | 6 | 7 | Providence | 92 | 17.2 | 19.5 | 21 |
| Cleveland | 111 | 6.5 | 7 | 6 | Houston | 90 | 17.0 | 21 | 19.5 |
| Philadelphia | 107 | 8.7 | 8 | 8 | St. Louis | 87 | 17.6 | 22 | 22 |
| Los Angeles | 103 | 9.3 | 9 | 9 | Boston | 86 | 20.1 | 23 | 23 |
| Milwaukee | 102 | 11.6 | 10 | 10.5 | Birmingham | 78 | 23.4 | 24 | 26 |
| Indianapolis | 101 | 12.6 | 11 | 13 | Dallas | 76 | 21.0 | 25 | 24 |
| Kansas City | 100 | 14.1 | 12 | 16 | Atlanta | 70 | 23.2 | 26 | 25 |
| Buffalo | 99 | 12.8 | 13.5 | 14 | | | | | |
| Chicago | 99 | 11.6 | 13.5 | 10.5 | | | | | |

[1] In cases where two or more cities have the same index or rank, the figure given represents the average of the ranks in which they would fall; i. e., 13.5 is the average of ranks 13 and 14, 16 is the average of ranks 15, 16, and 17, etc.

It might be expected that these two methods would yield substantially different results, particularly in view of the different weights given to the individual occupations. In the preparation of the index numbers these weights varied from 0.2 (female bread wrappers) to 17.5 (female bench assemblers, class C), whereas the method of average rankings gave all occupations the same weight. The comparison presented in table 3, however, reveals great similarity in the

[7] The figures used represent the estimated cost of a budget for a 4-person manual workers' family living at the maintenance level. This budget was defined by the Division of Social Research of the Works Progress Administration early in 1935. See Estimated Inter-City Differences in Cost of Living, March 15, 1943, in Monthly Labor Review, October 1943 (p. 803).

ranks of the areas and suggests that the weights assigned the various occupations have not been of major significance. The Detroit, Toledo, and Portland areas are respectively first, second, and third in both series. Both methods place the Atlanta, Dallas, and Birmingham areas at the bottom of the list, although their individual positions are somewhat different. The positions of only three areas—Kansas City, Minneapolis-St. Paul, and Chicago—are changed by more than two places. These shifts of position, moreover, are of little significance, since they involve areas whose wage levels appear to be very nearly the same.

### INFLUENCE OF INCENTIVE PAYMENT

It has been mentioned that prevalence of payment by the hour, day, or week was one of the criteria taken into consideration in selecting occupations for use in this analysis. Among certain manufacturing occupations, however—particularly assemblers, drill-press operators, and engine-lathe operators—incentive systems were in use by some establishments. Since the straight-time hourly earnings of incentive workers usually exceed the rates of time workers, the inclusion of incentive earnings tends to overstate somewhat the wage levels of those areas in which incentive payment is most common.[8]

It is doubtful, however, whether the index numbers or the ranks of the urban areas are influenced very substantially by the inclusion of incentive payments. In no area do incentive-paid workers represent a large proportion of those compared in this study. Moreover, a calculation of average ranks among eight occupations paid almost exclusively on a time basis [9] produces rankings very similar to those based on the index numbers. Only five areas are changed by more than four places. Philadelphia and Milwaukee—both areas in which incentive payment is common—drop five and six places, respectively, whereas Chicago, Minneapolis-St. Paul, and St. Louis move upward by approximately as many places. The changes in rank of the latter three cities probably are due to other differences and not to the elimination of incentive payments. Again the changes in rank are observed primarily among areas whose wages are closely similar, while the standing of the highest- and lowest-wage areas is not greatly changed. Incentive payment is not characteristic of the areas with top rating or of those in the South.

### STABILITY OF RANK

Critical examination of the wage data for individual occupations reveals that the relative wage levels of the individual areas vary considerably by occupation and that the index numbers and average rankings presented above tend to oversimplify the relationship between the wage levels of the various areas. It may be seen from table 4 that Detroit, which ranks first in 11 occupations, falls as low as seventh in the rate for male bread wrappers. Minneapolis-St. Paul, although twelfth in average rank, is first in the rate for class A electricians. St. Louis ranks last in three occupations, but fourth from the top in the rates for all-round bakers.

[8] The exclusion of incentive pay is desirable, not because the straight-time hourly earnings of incentive workers fail to reflect levels of pay accurately, but because the greater effort that is typically induced by incentive pay tends to disturb the comparability of jobs.

[9] These occupational classifications are as follows: All-round baker; maintenance electrician, classes A and B; tool and die maker, classes A and B; janitor; janitress; and hand trucker. It will be noticed that these occupations differ from the remaining 18 not only with regard to method of wage payment but in other important respects as well. Consequently the differences in the rank of the 8 occupations and those of the 26 may not be attributed entirely to the elimination of incentive pay.

TABLE 4.—*Rank of 26 Urban Areas, by Individual Manufacturing Occupation, Spring–Summer of 1943* [1]

| Occupation, class, and sex [2] | Detroit | Toledo | Portland | San Francisco | Seattle | Cleveland |
|---|---|---|---|---|---|---|
| Average rank | 2.5 | 4.2 | 4.5 | 5.0 | 5.6 | 6.5 |
| Metalworking: | | | | | | |
| Assemblers, bench: | | | | | | |
| Class A | 1 | 6 | 2 | 7 | 15 | 8 |
| Class B | 2 | 1 | 3 | 9 | 11 | 7 |
| Class C | 2 | 1 | (3) | 10 | (3) | 5 |
| Class B, female | 1 | 6 | 4 | 9 | 7.5 | 2 |
| Class C, female | 1 | 2 | (3) | 6 | (3) | 5 |
| Coremakers, hand, bench: | | | | | | |
| Class A | 3 | 8 | 5 | 4 | 11 | 2 |
| Class B | 4 | 10 | 2 | 16.5 | (3) | 5 |
| Drill-press operators, single spindle: | | | | | | |
| Class A | 2 | 1 | 4 | 9 | 5 | 6 |
| Class B | 6 | 1 | 3 | 5 | 4 | 8 |
| Class C | 5 | 1 | 4 | 2 | 3 | 8.5 |
| Class C, female | 4 | 1 | (3) | 5 | (3) | 8 |
| Electricians, maintenance: | | | | | | |
| Class A | 2 | 8 | 10 | 3 | (3) | 7 |
| Class B | 1 | 4 | (3) | 2 | (3) | 3 |
| Engine-lathe operators: | | | | | | |
| Class A | 1 | 8 | 4 | 2 | 3 | 11 |
| Class B | 1 | 5 | 3 | 2 | 4 | 7 |
| Class C | 3 | 1 | 2 | 4 | (3) | 10 |
| Class C, female | 2 | 1 | (3) | (3) | (3) | 7 |
| Shake-out men (foundry) | 1 | 3.5 | 5 | 7 | 6 | 8 |
| Tool and die makers: | | | | | | |
| Class A | 1 | 4 | 10 | 2 | 7 | 5 |
| Class B | 1 | 3 | 6 | 2 | (3) | 5 |
| Food products: | | | | | | |
| Bakers, all-round (bench hands) | 5 | 15 | 3 | 2 | 1 | 10 |
| Bread wrappers | 7 | 5 | 2 | 1 | 3 | 8.5 |
| Bread wrappers, female | 4 | 3 | (3) | 5 | (3) | 6.5 |
| Miscellaneous industries: | | | | | | |
| Janitors | 1 | 2.5 | 6 | 5 | 2.5 | 4 |
| Janitors, female | 1 | 4 | 7 | 2 | (3) | 5 |
| Truckers, hand | 2 | 5 | 4 | 3 | 1 | 7 |

| Occupation, class, and sex [2] | Pittsburgh | Philadelphia | Los Angeles | Chicago | Milwaukee | Minneapolis-St. Paul |
|---|---|---|---|---|---|---|
| Average rank | 7.5 | 8.7 | 9.3 | 11.6 | 11.6 | 12.5 |
| Metalworking: | | | | | | |
| Assemblers, bench: | | | | | | |
| Class A | 3 | 5 | 17 | 14 | 9 | 4 |
| Class B | 4 | 5 | 21 | 19 | 6 | 10 |
| Class C | 3 | 7 | 9 | 11 | 4 | 17 |
| Class B, female | (3) | 3 | 13 | 14 | 10 | 15 |
| Class C, female | 3 | 4 | 9 | 16 | 14.5 | 17 |
| Coremakers, hand, bench: | | | | | | |
| Class A | 9 | 1 | 6 | 13 | 14 | 19 |
| Class B | 6 | 1 | 11 | 7 | 9 | 8 |
| Drill-press operators, single spindle: | | | | | | |
| Class A | 3 | 7 | 8 | 16 | 13 | 11 |
| Class B | 2 | 9 | 18 | 11 | 7 | 13 |
| Class C | 11 | 10 | 16 | 17 | 6 | 20 |
| Class C, female | 18 | 3 | 9 | 15 | 7 | 20 |
| Electricians, maintenance: | | | | | | |
| Class A | 4 | 15 | 6 | 9 | 20 | 1 |
| Class B | 11 | 12 | 6 | 8 | 13 | 16 |
| Engine-lathe operators: | | | | | | |
| Class A | 7 | 5 | 6 | 13 | 15 | 18 |
| Class B | 6 | 9 | 8 | 14 | 10 | 15 |
| Class C | 7 | 12 | 6 | 5 | 8 | 11 |
| Class C, female | (3) | 8 | (3) | 5 | 6 | 15 |
| Shake-out men (foundry) | 12 | 14 | 13 | 11 | 16 | 9 |
| Tool and die makers: | | | | | | |
| Class A | 13 | 8 | 3 | 6 | 20.5 | 12 |
| Class B | 8 | 15 | 4 | 7 | 13 | 17 |
| Food products: | | | | | | |
| Bakers, all-round (bench hands) | 7 | 11 | 9 | 6 | 19 | 14 |
| Bread wrappers | 14 | 6 | 4 | 12.5 | 12.5 | 8.5 |
| Bread wrappers, female | 8.5 | (3) | 1 | 16 | 17 | 2 |
| Miscellaneous industries: | | | | | | |
| Janitors | 10 | 15 | 16 | 11 | 8 | 12.5 |
| Janitors, female | 3 | 15.5 | 8 | 9 | 12 | 10 |
| Truckers, hand | 8 | 16 | 6 | 15 | 12 | 10 |

[1] See footnotes at end of table.

TABLE 4.—*Rank of 26 Urban Areas, by Individual Manufacturing Occupation, Spring-Summer of 1943* [1]—Continued

| Occupation, class, and sex [2] | Indianapolis | Buffalo | Columbus | Kansas City | Cincinnati | Louisville | Houston |
|---|---|---|---|---|---|---|---|
| Average rank | 12.6 | 12.8 | 13.3 | 14.1 | 14.4 | 16.1 | 17.0 |
| Metalworking: | | | | | | | |
| Assemblers, bench: | | | | | | | |
| Class A | 18 | 22 | 23 | 13 | 20 | 11 | 19 |
| Class B | 8 | 20 | 16 | 14 | 17 | 13 | 12 |
| Class C | 6 | 12.5 | 8 | 12.5 | 14 | 21 | 19 |
| Class B, female | 11 | (3) | 5 | 7.5 | 12 | (3) | (3) |
| Class C, female | 11 | 12.5 | 14.5 | 8 | 7 | 18 | 12.5 |
| Coremakers, hand, bench: | | | | | | | |
| Class A | 23 | 11 | 11 | 21 | 17.5 | 22 | 16 |
| Class B | 13 | 14 | 3 | (3) | 12 | 20 | 16.5 |
| Drill-press operators, single spindle: | | | | | | | |
| Class A | 21 | 15 | 14 | 17.5 | 23 | 10 | 12 |
| Class B | 14 | 21 | 10 | 19 | 12 | 16 | 20 |
| Class C | 14 | 12 | 13 | 7 | 8.5 | 21 | 18 |
| Class C, female | 13 | 14 | 6 | 17 | 2 | 16 | 12 |
| Electricians, maintenance: | | | | | | | |
| Class A | 13.5 | 12 | 21 | 18 | 19 | 11 | (3) |
| Class B | 14 | 7 | 22 | 9 | 15 | 5 | 19 |
| Engine-lathe operators: | | | | | | | |
| Class A | 10 | 6.5 | 19 | (3) | 20 | 12 | 9 |
| Class B | 11 | 16 | 19 | 17 | 23 | 12 | 13 |
| Class C | 9 | 19 | 16 | (3) | 14 | 15 | 22 |
| Class C, female | 10 | 13 | 4 | (3) | 3 | 9 | 16 |
| Shake-out men (foundry) | 10 | 3.5 | 2 | 17 | 15 | 19 | 25 |
| Tool and die makers: | | | | | | | |
| Class A | 9 | 14 | 22 | 15 | 19 | 20.5 | 17 |
| Class B | 10 | 12 | 19 | 11 | 18 | 20 | 9 |
| Food products: | | | | | | | |
| Bakers, all-round (bench hands) | 16 | 12 | 21 | 8 | 13 | 22 | 17 |
| Bread wrappers | 11 | 10 | 15 | 20 | 17.5 | 17.5 | 21 |
| Bread wrappers, female | 10 | 8.5 | 6.5 | 11 | 13 | 14.5 | 14.5 |
| Miscellaneous industries: | | | | | | | |
| Janitors | 12.5 | 7 | 14 | 17 | 9 | 21 | 22 |
| Janitors, female | 15.5 | 6 | 11 | 18 | 13 | 14 | 22 |
| Truckers, hand | 13.5 | 9 | 11 | 13.5 | 18 | 22 | 26 |

| Occupation, class, and sex [2] | Baltimore | Providence | St. Louis | Boston | Dallas | Atlanta | Birmingham |
|---|---|---|---|---|---|---|---|
| Average rank | 17.0 | 17.2 | 17.6 | 20.1 | 21.0 | 23.2 | 23.4 |
| Metalworking: | | | | | | | |
| Assemblers, bench: | | | | | | | |
| Class A | 16 | 10 | 25 | 21 | (3) | 12 | 24 |
| Class B | 15 | 18 | 24 | 22 | 25 | 26 | 23 |
| Class C | 20 | 15 | 16 | 18 | 23 | 22 | (3) |
| Class B, female | (3) | 16 | (3) | 17 | (3) | (3) | (3) |
| Class C, female | 10 | 19 | (3) | 20 | (3) | (3) | (3) |
| Coremakers, hand, bench: | | | | | | | |
| Class A | 20 | 7 | 15 | 17.5 | (3) | 25 | 24 |
| Class B | 19 | 21 | 15 | 18 | 22.5 | 24 | 22.5 |
| Drill-press operators, single spindle: | | | | | | | |
| Class A | 17.5 | 19 | (3) | 22 | 20 | (3) | 24 |
| Class B | 15 | 17 | 25 | 23 | 22 | (3) | 24 |
| Class C | 19 | 15 | 25 | 22 | 24 | (3) | 22 |
| Class C, female | 11 | 10 | (3) | 19 | (3) | (3) | (3) |
| Electricians, maintenance: | | | | | | | |
| Class A | 13.5 | 22 | 5 | 17 | 16 | 23 | 24 |
| Class B | 17 | 20 | 18 | 21 | 10 | (3) | 25 |
| Engine-lathe operators: | | | | | | | |
| Class A | 14 | 22 | 21 | 23 | 25 | 24 | 16.5 |
| Class B | 18 | 20 | 21 | 22 | 25 | 26 | 24 |
| Class C | 19 | 21 | 13 | 19 | 17 | (3) | (3) |
| Class C, female | 12 | 11 | (3) | 14 | (3) | (3) | (3) |
| Shake-out men (foundry) | 22 | 21 | 18 | 20 | 25 | 26 | 24 |
| Tool and die makers: | | | | | | | |
| Class A | 18 | 16 | 11 | 26 | 23 | 24 | 25 |
| Class B | 16 | 22 | 14 | 21 | 23 | (3) | (3) |
| Food products: | | | | | | | |
| Bakers, all-round (bench hands) | 18 | (3) | 4 | (3) | 20 | 23 | 24 |
| Bread wrappers | 22 | (3) | 17.5 | (3) | 17.5 | 24 | 23 |
| Bread wrappers, female | 19 | (3) | (3) | (3) | 12 | 18 | (3) |
| Miscellaneous industries: | | | | | | | |
| Janitors | 19 | 18 | 23 | 20 | 24 | 26 | 25 |
| Janitors, female | 17 | 19 | 21 | 20 | 23 | (3) | (3) |
| Truckers, hand | 19 | 17 | 21 | 20 | 23 | 25 | 24 |

[1] In cases where two or more cities have the same rank, the figure given represents the average of the ranks in which they would fall; i. e., 2.5 is the average of ranks 2 and 3, 17.5 is the average of ranks 17 and 18, etc.

[2] Male unless otherwise designated.

[3] Data not available.

Obviously these rankings for individual occupations are considerably influenced by random factors and should not be regarded as highly significant. In some cases, moreover, considerable differences in occupational rank may reflect wage differences of only 3 or 4 cents per hour. The detail for individual occupations is useful, however, as the basis of a rough measure of the stability of the over-all ranks. This measure may be formulated by comparing each area's rank in each individual occupation with its average rank, and averaging the deviations. For example, the various ranks of Detroit among the 26 occupations deviate by an average of 1.5 points from the area's average rank of 2.5. This would appear to indicate that Detroit's position at or near the top of the list is rather consistent among the various occupations.

The lowest average rank, that of Birmingham, is also relatively stable, since the average deviation is only 1.1. For only 5 areas, however, is the average deviation less than 2.0. For 5 it is 2.0 but less than 3.0, and for 9 it is 3.0 but less than 4.0. The 7 areas with least-stable rank are Columbus (5.3), St. Louis (4.8), Cincinnati (4.2), Minneapolis-St. Paul (4.1), Louisville (4.1), Los Angeles (4.0), and Philadelphia (4.0).[10] As would be expected, fluctuations in rank are most pronounced among those areas the wage levels of which cluster within a narrow range.

## COMPARISONS WITH COMMON LABOR RATES

In view of the great influence of the metal trades in the composite index numbers and ranks presented above, and in view of the instability of rank of certain areas, it is of interest to compare these composite measures with other measures of intercity differences in wage level. The most appropriate alternative measure available consists of the average entrance rates of male common laborers in manufacturing industries in 1943.[11] Although the rates in that occupation are also materially influenced by wage practice in the metal trades, they cover a number of other industries, including meat packing, fertilizer, furniture, leather, and petroleum. Common-labor entrance rates represent time payments exclusively. They are less frequently determined by collective-bargaining agreements than are the wages of skilled workers.

The comparison afforded by table 5 reveals a fairly close correlation between the composite index and the index of common-labor entrance rates. In both series the highest index is found in Detroit [12] and the lowest in Atlanta. In each case the maximum index number is approximately twice the minimum. The 5 highest-wage areas are the same by both measures, as are also 3 of the 5 lowest-wage areas. The coefficient of correlation is 0.89. In 18 of the 26 areas the ranks are the same or differ by not more than 3 places. Several striking differences may be noted, however. Cincinnati ranks sixteenth

[10] The stability of rank of the various occupations can be similarly measured. Among the 26 individual areas in which class A tool and die makers' wages were studied, these workers rank first in every case, yielding an average rank of 1 and an average deviation of 0. Female janitors, who rank last, show an average deviation of 1.5. All of the average deviations for occupations are relatively low, the highest being for all-round bakers and female bread wrappers (both 3.8).

[11] See Hourly Entrance Rates of Common Laborers in Large Cities, Spring and Summer of 1943 in Monthly Labor Review, April 1944. The averages here used represent manufacturing industry only and are taken from table 2 (p. 811). It should be noted that the areas represented by the common-labor rates are somewhat more restricted than those used in this article, being limited for the most part within city boundaries.

[12] It will be noted, however, that Detroit's top position in common-labor rates was shared by Portland and San Francisco.

in the composite index but twenty-third in the index of common-labor rates, and Indianapolis ranks eleventh in the composite index but seventeenth in the common-labor index. The comparative ranks of 5 other areas differ by 4 places or more. [13]

TABLE 5.—*Differences in Manufacturing Wage Levels in Urban Areas as Measured by Composite Index and by Common-Labor Entrance Rates, Spring–Summer of 1943*

| Area | Index number (average, all areas = 100) | | Rank [1] | | Area | Index number (average, all areas = 100) | | Rank [1] | |
|---|---|---|---|---|---|---|---|---|---|
| | Composite index | Common labor | Composite index | Common labor | | Composite index | Common labor | Composite index | Common labor |
| Detroit | 131 | 129 | 1 | 2 | Cincinnati | 98 | 82 | 16 | 2 |
| Toledo | 127 | 116 | 2 | 5 | Columbus | 98 | 90 | 16 | 1 |
| Portland | 117 | 129 | 3 | 2 | Minneapolis-St. Paul | 98 | 102 | 16 | 1 |
| Seattle | 116 | 126 | 4 | 4 | Baltimore | 94 | 98 | 18 | 1 |
| San Francisco | 114 | 129 | 5 | 2 | Louisville | 92 | 81 | 19.5 | 2 |
| Pittsburgh | 113 | 112 | 6 | 6 | Providence | 92 | 95 | 19.5 | 1 |
| Cleveland | 111 | 106 | 7 | 8 | Houston | 90 | 88 | 21 | 2 |
| Philadelphia | 107 | 102 | 8 | 10.5 | St. Louis | 87 | 86 | 22 | 2 |
| Los Angeles | 103 | 111 | 9 | 7 | Boston | 86 | 90 | 23 | 1 |
| Milwaukee | 102 | 99 | 10 | 14 | Birmingham | 78 | 78 | 24 | 2 |
| Indianapolis | 101 | 94 | 11 | 17 | Dallas | 76 | 87 | 25 | 2 |
| Kansas City | 100 | 103 | 12 | 9 | Atlanta | 70 | 63 | 26 | 2 |
| Buffalo | 99 | 101 | 13.5 | 12.5 | | | | | |
| Chicago | 99 | 101 | 13.5 | 12.5 | | | | | |

[1] In cases where two or more cities have the same index, the rank given represents the average of the ranks in which they would fall; i. e., 13.5 is the average of ranks 13 and 14, 19.5 is the average of ranks 19 and 20, etc

## *Wage Levels in Nonmanufacturing*

For 24 of the urban areas discussed above, and for 5 additional areas, index numbers of wage levels in nonmanufacturing industry have been prepared. These index numbers, it will be recalled, are based on wage data for 9 occupations in banks, laundries, and miscellaneous industries. In general, the establishments in which these occupations were found were smaller than the manufacturing establishments studied. Unionization was less common, and incentive payment negligible.

The index numbers and rankings in the nonmanufacturing field have been presented in table 2. Comparison of these with the corresponding measures based on manufacturing occupations reveals much similarity, but a few significant differences.

Both series of index numbers, it will be noted, reveal about the same regional variations in wage level, although the New England areas appear somewhat more favorably in nonmanufacturing than in manufacturing. The range from the lowest to the highest index number is also approximately the same in each case. Correlation of the index numbers for areas appearing in both series yields a coefficient of 0.68.

It will be noted that Seattle ranks first in the level of nonmanufacturing wages, with San Francisco a very close second, and Portland third. Detroit holds fourth place in nonmanufacturing. Four of the leading five areas, therefore, are common to both series. All of the five lowest-wage areas in nonmanufacturing are in the South.

[13] For other comparisons of possible interest, see Union Wages and Hours in the Baking Industry, July 1, 1943, in Monthly Labor Review, March 1944 (table 8, p. 609), and Union Wages and Hours in the Printing Trades, July 1, 1943, in Monthly Labor Review, April 1944 (table 6, p. 831).

The index numbers and rank of several areas differ greatly in the two series. Kansas City, for example, is near the middle of the group with respect to manufacturing wages but in nonmanufacturing is represented by an index number of only 88 and is tied with St. Louis for twenty-second place. Toledo ranks second in manufacturing but only eleventh in nonmanufacturing. Buffalo, paying only about average wages in manufacturing, ranks fifth from the top in nonmanufacturing. Boston, Chicago, and Providence all rank considerably higher in the nonmanufacturing series than in manufacturing.[14]

## AVERAGE RANK OF AREAS

The ranks of the various urban areas, by individual occupation, are given in table 6. The order of the areas on the basis of average rank will be seen to correspond rather closely with that based on the index numbers. The position of only one area, Houston, differs by more than three places.

TABLE 6.—*Rank of 29 Urban Areas, by Individual Nonmanufacturing Occupation, Spring–Summer of 1943* [1]

| Area | Average rank | Financial institutions | | Power laundries | | | Miscellaneous industries | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Paying and receiving tellers, male | Paying and receiving tellers, female | Feeders, catchers, and shakers (flatwork), female | Markers, female | Washers, male | Elevator operators, passenger, male | Elevator operators, passenger, female | File clerks, class B, female | Switchboard operators, female |
| San Francisco | 1.9 | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 1 | 5 |
| Seattle | 2.0 | 2 | 2 | 1 | 2 | 1 | (2) | 2 | 3 | 3 |
| Detroit | 5.5 | 7 | 5 | 6.5 | 9 | 5 | 5 | 7 | 4 | 1 |
| Portland | 6.4 | 17 | 3 | 3 | 5 | 8 | (2) | 3 | 11 | 6 |
| Cleveland | 8.1 | 11 | 9 | 11 | 7 | 7.5 | 6 | 5 | 5 | 11 |
| Los Angeles | 9.1 | 20.5 | 17 | 5 | 3.5 | 7.5 | 7 | 6 | 2 | 13 |
| Buffalo | 9.3 | 6 | 9 | 4 | 3.5 | 16.5 | 25.5 | 11 | 6 | 2 |
| Milwaukee | 9.8 | 3.5 | 7 | 8 | 11 | 4 | 9 | 14 | 13 | 19 |
| Chicago | 9.9 | 20.5 | 16 | 6.5 | 6 | 11.5 | 1 | (2) | 9 | 9 |
| Pittsburgh | 10.5 | 5 | 20.5 | 18 | 15 | 6 | 2 | 4 | 20 | 4 |
| Washington | 11.2 | 3.5 | 4 | 16 | 8 | 21 | 14.5 | 10 | 8 | 16 |
| Providence | 13.1 | 9.5 | 12.5 | 9.5 | 11 | 9.5 | 19.5 | 16 | (2) | 17.5 |
| Philadelphia | 13.5 | 17 | 23 | 17 | 17.5 | 11.5 | 4 | 8.5 | 15 | 8 |
| Toledo | 13.6 | 13 | 25 | 9.5 | 12.5 | 9.5 | 11 | 17.5 | 16 | 7 |
| Boston | 14.8 | 8 | 14.5 | 15 | 17.5 | 22 | 13 | 19 | 14 | 10 |
| Minneapolis-St. Paul | 15.4 | 20.5 | 23 | 14 | 17.5 | 14.5 | 10 | 12.5 | 12 | 15 |
| Indianapolis | 15.6 | 24.5 | 12.5 | 13 | 11 | 14.5 | 16 | 21 | 10 | 17.5 |
| Cincinnati | 15.8 | 23 | 11 | 12 | 13.5 | 16.5 | 8 | 21 | 23.5 | 14 |
| Columbus | 16.5 | 14 | 18.5 | 10 | 17.5 | 13 | 18 | 21 | 7 | 20.5 |
| Baltimore | 18.1 | 17 | 28 | 21 | 22 | 19.5 | 12 | 8.5 | 17 | 23 |
| Houston | 19.6 | 12 | 9 | 25 | 26 | 24 | 17 | 17.5 | 22 | 24 |
| St. Louis | 20.7 | 15 | 26 | 23 | 24.5 | 25 | 14.5 | 12.5 | 23.5 | 22 |
| Denver | 20.9 | 20.5 | 18.5 | 20 | 20.5 | 19.5 | 23 | 15 | 26 | 25 |
| Kansas City | 22.2 | 26 | 14.5 | 24 | 23 | 23 | (2) | 27 | 28 | 12 |
| Memphis | 22.6 | 9.5 | 6 | 29 | 27 | 29 | 21.5 | 28 | 27 | 26 |
| Dallas | 23.6 | 24.5 | 28 | 26 | 24.5 | 27 | 19.5 | 23 | 19 | 20.5 |
| Louisville | 24.2 | 28 | 29 | 22 | 20.5 | 18 | 24 | 24.5 | 25 | 27 |
| New Orleans | 25.5 | 27 | 27 | 27 | 29 | 26 | 21.5 | 26 | 18 | 28 |
| San Antonio | 25.9 | 29 | 20.5 | 28 | 28 | 28 | 25.5 | 24.5 | 21 | 29 |

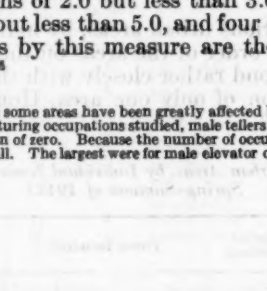
[1] In cases where two or more cities have the same rank, the figure given represents the average of the ranks in which they would fall; i. e. 3.5 is the average of ranks 3 and 4; 14.5 is the average of ranks 14 and 15, etc.
[2] Data not available.

[14] These comparisons are complicated somewhat by the fact that some of the ranks are assigned to areas that appear in only one series. On the basis of corrected rankings, covering only the 24 areas common to both series, 7 areas (mostly in the middle-wage range) show differences of position of more than 4 places.

The relative wage levels of some areas, however, will be seen to vary greatly from occupation to occupation. Chicago, which ranks first in the payment of male elevator operators, ranks nineteenth with respect to the wages of male tellers.[15] The Memphis area, which ranks last in three occupations, ranks sixth and ninth in two others. Application of the measure of stability described above reveals that Seattle has the most stable rank, with an average deviation of only 0.5 place. San Francisco (1.0) and Detroit (1.7) also have relatively stable ranks. On the whole, the rank of the areas with respect to nonmanufacturing occupations appears to be somewhat less stable than that based on manufacturing occupations. The ranks of six areas have average deviations of 2.0 but less than 3.0, seven of 3.0 but less than 4.0, seven of 4.0 but less than 5.0, and four of 5.0 but less than 6.0. The least stable ranks by this measure are those for Memphis (6.8) and Pittsburgh (7.0).[16]

[15] The rates shown for tellers in some areas have been greatly affected by labor turnover.

[16] Among the nine nonmanufacturing occupations studied, male tellers received the highest wage in every city, yielding an average deviation of zero. Because the number of occupations studied was so limited, all of the average deviations were small. The largest were for male elevator operators (1.2) and female file clerks (1.0).



# Importance of Minor Injuries in Shipyards [1]


## *Summary*

NONDISABLING industrial injuries [2] are estimated to have caused time losses equivalent to full-time employment for over 1,400 workers in the private shipyards of the United States during 1943. The time taken for first aid or medical treatment by workers who experienced minor injuries totaled nearly 3,500,000 man-hours, and for this unproductive time the shipyards paid approximately $3,700,000 in wages.

On the basis of comprehensive reports received from the great majority of shipyards holding either Maritime Commission or Navy Department contracts, the total number of disabling injuries experienced by shipyard [3] workers during 1943 is estimated to have been about 102,500. A recent study made by the Bureau of Labor Statistics in a large East Coast shipyard confirms previous findings [4] that for every disabling industrial injury there are, on the average, 29 nondisabling injuries. If, as seems reasonable, this ratio may be accepted as prevailing throughout the shipbuilding industry, the total volume of nondisabling industrial injuries experienced by shipyard workers during 1943 may be estimated as nearly 3,000,000.

The importance of this volume of minor injuries becomes more apparent in view of the fact that this represents an average of more than two injuries for every full-year worker in the industry. Each of these nondisabling injuries, on the average, required at least two visits to the infirmary, and the time taken for those treatments in the aggregate amounted to practically the same as the total time lost because of temporary total disabilities. Actually, 10 of the 23 major departments of the yard in which the detailed study was made had nondisabling-injury time losses which exceeded the losses arising from temporary total disabilities.

The Bureau's study further revealed that fractures, hernias, strains and sprains, industrial disease, and welder's flash cases were types of injuries most likely to be disabling. In contrast, relatively few cases of burns, cuts and lacerations, bruises, or foreign bodies in the eye caused disability beyond the day of injury. In general, injuries to the trunk were most likely, and injuries to fingers, hands, and arms were least likely, to be disabling.

Both disabling and nondisabling injuries were considerably more frequent in the summer than in the winter. Similarly, the proportion of 1-day disabilities was higher in the summer than in the winter. The available evidence, however, does not prove that these apparent seasonal trends represent actual variations in the occurrence of accidents as opposed to variations in injury reporting.

Repeat injuries were very common. More than half of the workers who received treatment for injury returned for treatment of a second


[1] Prepared in the Bureau's Industrial Hazards Division by Frank S. McElroy and George R. McCormack.

[2] Nondisabling injuries are those which neither result in death or permanent physical impairment, nor cause any inability to work beyond the day of injury.

[3] Not including United States navy yards.

[4] Industrial Accident Prevention, by H. W. Heinrich (New York, McGraw-Hill Book Co., Inc., 1941), pp. 26-27.

injury during the 12-month period. A considerable number of individuals each reported 10 or more injuries, and one welder reported 39.

Infection was rare among the injuries which were given immediate medical attention. Each day of delay in reporting to the medical office, however, resulted in an increased proportion of infections. Forty percent of all injuries which were first reported 5 or more days after the accident developed infections.

## *Purpose and Method of Study*

The usual compilations of industrial-injury data fall far short of telling the entire story of the time losses resulting from industrial injuries. No account is taken of any losses arising from nondisabling injuries. Furthermore, the tabulations of losses resulting from disabling injuries omit all time lost on the day of injury and also the time taken for first-aid or medical treatments after the recovered worker has returned to work.

The Bureau's study, made (as noted) in a large East Coast shipyard, was an attempt to evaluate some of these omissions by determining for a particular establishment the extent of (1) the time losses arising from nondisabling injuries and (2) the time losses arising from disabling injuries which are not taken into account in the standard method of computing lost time.

As the determination of these factors involved the detailed examination of a large group of injury records, certain other data of interest to every safety engineer were also recorded and analyzed. These additional data were correlated, to determine—

(a) The proportion of different types of injury which result in disability;

(b) The proportion of injuries to different parts of the body, which result in disability;

(c) The seasonal differences, if any, in the ratio of disabling to nondisabling injuries;

(d) The proportion of all injuries experienced by "repeaters"; and

(e) The effect of delay in reporting minor injuries upon the probability of infection.

The shipyard in which the study was made employs more than 29,000 workers. In the 12-month period selected for study, over 77,000 injuries were reported and treated at the first-aid units. Two well-equipped dispensaries, staffed with doctors and registered nurses, are maintained upon the premises. By observation it was determined that no part of the yard was more than a 5-minute walk from one or the other of these stations and that patients rarely were required to wait more than a few minutes for attention. In this yard, therefore, a half hour was considered sufficient time for an employee to be away from his work for an ordinary visit to the infirmary. In practice, this time allowance must be considered an absolute minimum because of the many possible delays which may occur on the way through the yards. To avoid any possibility of exaggeration, the half-hour allowance for each infirmary visit was used throughout the study. It appears safe to say that the conclusions as to the total time lost are conservative.

Because of the very large volume of injuries treated in the first-aid stations, the study was made on a sample basis rather than by consideration of every recorded case. In order to obtain a purely random sample which would be representative of all departments and of all periods of the year, the sample was selected by taking all injuries experienced by employees whose names began with the first five letters of the alphabet. This procedure yielded a total of 23,188 cases for analysis, or approximately 30 percent of all the new injuries recorded in the first-aid units during the 12-month period.

## *Time Lost*

Of the 23,188 injuries analyzed, 781 were disabling[5] and 22,407 were nondisabling. For every disabling injury, therefore, there were about 29 cases which were nondisabling. As the production losses resulting from deaths and permanent impairments cannot be accurately measured, the 5 deaths and 19 permanent impairment cases were eliminated from consideration and all comparisons were made between the cases involving temporary total disability and those commonly designated as nondisabling (i. e., involving no inability to work extending beyond the day of injury).

Following the standard method of computing lost time and counting only the full days of disability subsequent to the day of injury, the 757 temporary total disabilities accounted for a loss of 3,730 man-days. Each of these injured persons, however, required attention at the first-aid station on the day of injury, and considerable numbers were sent home before the end of the shift. In addition, these injured workers each made an average of 3 visits to the infirmary for further treatment after they returned to their regular duties. On the basis of a half hour each, the treatments given in the plant because of these injuries consumed 1,524 man-hours. The actually recorded "pass out" time of those who were sent home early indicated the further loss of 562 man-hours. Together these items represent 261 man-days, or about one-third of a day per case, which must be added to the 3,730 man-days regularly charged as lost because of the temporary total disabilities, an increase of 7 percent in the total.

The 22,407 nondisabling injuries required an average of 2.3 infirmary visits each, consuming 25,745 man-hours of production time. Some of these injured persons were also sent home for the remainder of the day on which they were injured. The actually recorded time lost in this way totaled 339 man-hours. Reduced to equivalent 8-hour days, therefore, the nondisabling injuries caused the loss of a total of 3,261 man-days.

Comparatively, the time loss occasioned by nondisabling—the so-called "no lost time"—injuries amounted to 87 percent of the lost time regularly ascribed to temporary total disabilities. The total time loss because of temporary total disabilities, as determined by the standard method, therefore, represents only slightly more than half of the total time loss.

[5] A disabling injury is one which results in (a) death or (b) permanent physical impairment or (c) which renders the injured person unable to resume work for any period beyond the day or shift on which the injury occurred.

TABLE 1.—*Summary of Industrial Injuries in an East Coast Shipyard, October 1 1942–September 30, 1943* [1]

| Item | Number |
|---|---|
| Total number of injuries | [illegible] |
| Number of nondisabling injuries | [illegible] |
| Number of disabling injuries | [illegible] |
| Number of nondisabling injuries for every disabling injury | [illegible] |
| Temporary total disabilities: | |
| Number | [illegible] |
| Days lost (standard measurement method) | [illegible] |
| Time lost not accounted for under standard measurement method: | |
| On day of injury (hours) | [illegible] |
| For treatments at work (hours) | [illegible] |
| Total time lost: | |
| Hours | [illegible] |
| Equivalent days | [illegible] |
| Average number of treatments at work | [illegible] |
| Nondisabling injuries: | |
| Time lost: | |
| On day of injury (hours) | [illegible] |
| For treatments at work (hours) | [illegible] |
| Total time lost: | |
| Hours | [illegible] |
| Equivalent days | [illegible] |
| Average number of treatments | [illegible] |

[1] Based on approximately 30 percent of all reported injuries.

## *Departmental Differences*

Among the different departments of the shipyard the ratio of nondisabling to disabling injuries varied widely, and consequently the proportion of lost time unaccounted for under the standard differed greatly from the plant average. In the blacksmith and forge department there were no disabling injuries, but there were 133 minor injuries which required first aid (table 2). These first-aid cases involved a loss equivalent to 17 man-days.

In the welding department, which had the highest ratio of disabling injuries (1 to every 13 nondisabling cases), the time losses resulting from nondisabling injuries amounted to 59 percent of the losses regularly charged to temporary total disabilities.

In addition to the blacksmith and forge department, in which there were no disabling injuries, there were nine departments of the yard in which the actual time lost because of nondisabling injuries exceeded the losses arising from disabling injuries. There were also three others in which the addition of time taken for treatment at work and "pass out" time on the day of injury for the temporary disabilities raised the total of unaccounted-for time losses to as much as or more than the amount ordinarily charged to disabling injuries.

TABLE 2.—*Industrial Injuries in an East Coast Shipyard, by Department, Oct. 1, 1942–Sept. 30, 1943* [1]

TABLE 2.—*Industrial Injuries in an East Coast Shipyard, by Department, Oct. 1, 1942–Sept. 30, 1943* [1]

| Department | Number of injuries | | | Number of nondisabling injuries for every disabling injury | Temporary total disabilities | | | | | | | Nondisabling injuries | | | | | Average number of treatments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Number | Days lost (standard measurement method) | Time lost not accounted for under standard measurement method | | | | Average number of treatments at work | Time lost | | | | | |
| | | | | | | | On day of injury (hours) | For treatments at work (hours) | Total | | | On day of injury (hours) | For treatments at work (hours) | Total | | |
| | Total | Disabling | Nondisabling | | | | | | Hours | Equivalent days | | | | Hours | Equivalent days | |
| All departments | 23,168 | 781 | 22,407 | 28.7 | 757 | 3,730 | 502.0 | 1,524.0 | 2,066.0 | 261 | 4.0 | 339.5 | 25,745.0 | 26,084.5 | 3,261 | 2.3 |
| Blacksmith and forge shop | 133 | | 133 | | | | | | | | | | | | | |
| Boilermakers | 321 | 7 | 314 | 44.9 | 7 | 22 | 18.0 | 19.5 | 34.5 | 4 | 5.6 | 5.5 | 131.0 | 136.5 | 17 | 2.0 |
| Carpenters | 269 | 13 | 256 | 19.7 | 13 | 53 | 12.5 | 31.5 | 44.0 | 6 | 4.8 | 2.0 | 293.0 | 295.0 | 37 | 2.7 |
| Coppersmiths | 558 | 7 | 551 | 78.7 | 7 | 128 | 6.0 | 24.0 | 29.0 | 4 | 6.9 | 4.0 | 635.0 | 639.0 | 80 | 2.3 |
| Driller | 641 | 15 | 626 | 41.7 | 15 | 46 | 3.5 | 38.5 | 42.0 | 5 | 5.1 | | 746.0 | 746.0 | 93 | 2.4 |
| Electricians | 1,904 | 69 | 1,835 | 27.5 | 65 | 318 | 54.0 | 184.5 | 238.5 | 30 | 5.7 | 28.5 | 2,021.5 | 2,050.0 | 256 | 2.1 |
| Erecting | 851 | 21 | 830 | 38.5 | 20 | 75 | 26.5 | 51.0 | 79.5 | 10 | 6.1 | 18.0 | 1,097.5 | 1,115.5 | 139 | 2.6 |
| Fitting | 3,210 | 119 | 3,091 | 26.0 | 117 | 469 | 82.5 | 224.5 | 307.0 | 38 | 3.8 | 22.0 | 3,657.5 | 3,679.5 | 461 | 2.4 |
| Foundry | 146 | 5 | 141 | 28.2 | 5 | 41 | 8.5 | 17.5 | 26.0 | 3 | 7.0 | | 143.0 | 143.0 | 18 | 2.0 |
| Joiners | 729 | 13 | 716 | 55.1 | 12 | 62 | 8.5 | 34.5 | 43.0 | 5 | 5.8 | 9.5 | 823.0 | 832.5 | 104 | 2.3 |
| Machine shop | 1,523 | 14 | 1,509 | 107.8 | 11 | 154 | 8.5 | 65.5 | 74.0 | 9 | 11.9 | 6.5 | 1,472.5 | 1,479.0 | 185 | 2.0 |
| Office | 422 | 6 | 416 | 69.3 | 5 | 8 | 2.0 | 8.5 | 10.5 | 1 | 3.4 | 6.0 | 434.5 | 440.5 | 55 | 2.1 |
| Painting | 556 | 20 | 536 | 26.8 | 20 | 121 | 26.0 | 48.5 | 74.5 | 9 | 4.9 | 20.5 | 597.5 | 618.0 | 77 | 2.2 |
| Pipe covering | 146 | 3 | 143 | 47.7 | 3 | 15 | | 14.5 | 14.5 | 2 | 9.7 | | 157.5 | 157.5 | 20 | 2.2 |
| Plumbing | 1,486 | 32 | 1,454 | 45.4 | 28 | 162 | 16.0 | 57.5 | 53.5 | 7 | 2.7 | 27.0 | 1,623.0 | 1,650.0 | 206 | 2.3 |
| Riveting | 1,237 | 47 | 1,190 | 24.9 | 45 | 267 | 74.0 | 92.5 | 166.5 | 21 | 4.1 | 14.5 | 1,306.0 | 1,320.5 | 165 | 2.2 |
| Sheet metal | 1,583 | 40 | 1,483 | 29.7 | 40 | 294 | 25.0 | 126.5 | 151.5 | 19 | 5.1 | 30.0 | 1,813.5 | 1,843.5 | 230 | 2.4 |
| Shipwrights | 1,676 | 44 | 1,632 | 41.6 | 44 | 156 | 98.5 | 46.0 | 144.5 | 18 | 3.9 | 27.0 | 1,973.0 | 2,000.0 | 250 | 2.2 |
| Steam engineering | 906 | 30 | 876 | 22.2 | 29 | 170 | 22.0 | 64.5 | 86.5 | 11 | 4.4 | 16.5 | 867.0 | 883.5 | 110 | 2.6 |
| Storeroom | 196 | 19 | 177 | 41.4 | 18 | 122 | 19.5 | 43.0 | 62.5 | 8 | 4.8 | 9.5 | 838.5 | 848.0 | 106 | 2.2 |
| Tankroom | 155 | 4 | 151 | 37.8 | 4 | 20 | | 6.0 | 6.0 | 1 | 3.0 | .5 | 169.5 | 170.0 | 21 | 2.2 |
| Transportation | 237 | 8 | 229 | 28.6 | 8 | 128 | 6.0 | 20.5 | 26.5 | 3 | 5.1 | 2.5 | 252.0 | 254.5 | 32 | 2.2 |
| Welding | 3,002 | 220 | 2,782 | 12.6 | 220 | 722 | 72.5 | 261.0 | 334.5 | 42 | 2.4 | 84.0 | 3,338.0 | 3,422.0 | 428 | 2.4 |
| Other | 711 | 15 | 696 | 46.4 | 11 | 129 | 12.0 | 25.0 | 37.0 | 5 | 4.5 | 5.5 | 914.5 | 920.0 | 115 | 2.6 |

[1] Based on approximately 30 percent of all reported injuries.

## *Nature of Injuries*

Amputations, fractures, hernias, and cases of industrial disease represented only 1.1 percent of the entire group of injuries studied. A very high proportion (42 percent) of these injuries were disabling, however, and as a group they accounted for 13.8 percent of all the disabling injuries. In contrast, bruises, of which 1 in 30 were disabling, constituted 24.4 percent of the total volume of injuries and an almost equal proportion (23. 8 percent) of the disabling cases. Only 1 in every 97 cuts or lacerations was disabling. This group, which also included slightly over 23 percent of the entire volume of injuries, accounted for only 7.2 percent of the disabling injuries. One in every 13 cases of welder's flash was disabling, but only 1 in 57 of the cases resulting from foreign bodies lodging in the eye was disabling. Strains and sprains accounted for only 4.8 percent of the total volume of injuries, but the ratio of disabling cases (1 in 12) was high. Burns and scalds, on the other hand, accounted for 14.4 percent of all injuries, but only 1 in 86 of these cases was disabling.

When consideration is given to the amount of time lost because of nondisabling injuries as compared with the usually recorded losses from disabling injuries, burns and scalds, cuts and lacerations, welder's flash, and cases of foreign bodies in the eyes assume much greater importance. Nondisabling injuries in each of these classifications caused more lost time than did temporarily disabling cases of the same type (table 3).

TABLE 3.—*Industrial Injuries in an East Coast Shipyard, by Nature of Injury, Oct. 1, 1942–Sept. 30, 1943* [1]

| Nature of injury | Number of injuries | | | Number of nondisabling injuries for every disabling injury | Temporary total disabilities | | | | Nondisabling injuries | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Disabling | Nondisabling | | Number | Days lost (standard measurement method) | Time lost not accounted for under standard measurement method (equivalent days) | Average number of treatments at work | Time lost (equivalent days) | Average number of treatments |
| Total | 23,188 | 781 | 22,407 | 28.7 | 757 | 3,730 | 261 | 4.0 | 3,261 | 2.3 |
| Amputations | 6 | 6 | 0 | | | | | | | |
| Burns and scalds | 3,284 | 38 | 3,246 | 85.4 | 37 | 218 | 14 | 5.1 | 575 | 2.8 |
| Without infection | 3,014 | 31 | 2,983 | 96.2 | 30 | 201 | 13 | 5.5 | 513 | 2.7 |
| With infection | 270 | 7 | 263 | 37.6 | 7 | 17 | 1 | 3.1 | 62 | 3.8 |
| Cuts and lacerations | 5,410 | 56 | 5,354 | 95.6 | 51 | 375 | 29 | 6.3 | 765 | 2.4 |
| Without infection | 5,063 | 48 | 5,015 | 104.5 | 43 | 291 | 25 | 6.3 | 701 | 2.2 |
| With infection | 347 | 8 | 339 | 42.4 | 8 | 84 | 4 | 6.5 | 64 | 3.0 |
| Strains and sprains | 1,097 | 94 | 1,003 | 10.7 | 94 | 502 | 36 | 4.0 | 162 | 2.5 |
| Bruises | 5,555 | 186 | 5,369 | 28.9 | 184 | 1,007 | 92 | 5.6 | 973 | 2.9 |
| Without infection | 5,509 | 182 | 5,327 | 29.3 | 181 | 990 | 91 | 5.6 | 964 | 2.8 |
| With infection | 46 | 4 | 42 | 10.5 | 3 | 17 | 1 | 5.7 | 9 | 3.5 |
| Fractures | 104 | 49 | 55 | 1.1 | 41 | 385 | 29 | 8.3 | 33 | 9.2 |
| Hernia | 20 | 16 | 4 | .3 | 16 | 636 | 3 | 2.8 | | 1.5 |
| Industrial disease | 128 | 37 | 91 | 2.5 | 37 | 51 | 8 | 1.9 | 8 | 1.2 |
| Welder's flash | 2,748 | 207 | 2,541 | 12.3 | 207 | 213 | 19 | 1.3 | 251 | 1.5 |
| Dust particles in eyes | 4,364 | 77 | 4,287 | 55.7 | 77 | 321 | 28 | 5.0 | 456 | 1.7 |
| Without infection | 4,341 | 74 | 4,267 | 57.7 | 74 | 280 | 27 | 5.1 | 450 | 1.7 |
| With infection | 23 | 3 | 20 | 6.7 | 3 | 41 | 1 | 3.0 | 8 | 6.0 |
| Not elsewhere classified | 94 | 15 | 79 | 5.3 | 13 | 22 | 3 | .9 | 12 | 1.5 |
| Unknown | 378 | | 378 | | | | | | 24 | 1.0 |

[1] Based on approximately 30 percent of all reported injuries.

## *Part of Body Injured*

As a group, eye injuries constituted 36 percent of all the injuries studied and about 39 percent of all the disabling cases. The latter figure is somewhat higher than the average proportion of disabling eye injuries for the shipbuilding industry.[6] However, the total injury-frequency rate for this yard conformed closely to the national shipbuilding average.

Although injuries to fingers, hands, and arms accounted for over 37 percent of the reported cases, only 1 in every 162 finger injuries, 1 in 88 hand injuries, and 1 in 61 arm injuries were classed as disabling. Therefore the recorded time loss for injuries to the upper extremities causing temporary total disability represented only about one-sixth of the actual time lost because of these injuries.

Injuries to the lower extremities and to the trunk produced a much higher proportion of disabilities. One in every 12 foot injuries, 1 in every 17 toe injuries, 1 in every 10 back injuries, 1 in every 6 chest injuries, and 1 in every 5 abdominal injuries were disabling (table 4). The time lost because of disabling injuries to the lower extremities, therefore, was double that caused by nondisabling cases. For the group of trunk injuries the time lost because of disabling cases was about 7 times that arising from nondisabling cases.

TABLE 4.—*Industrial Injuries in an East Coast Shipyard, by Location of Injury, Oct. 1, 1942–Sept. 30, 1943* [1]

| Location of injury | Number of injuries | | | Number of nondisabling injuries for every disabling injury | Temporary total disabilities | | | | Nondisabling injuries | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Disabling | Nondisabling | | Number | Days lost (standard measurement method) | Time lost not accounted for under standard measurement method (equivalent days) | Average number of treatments at work | Time lost (equivalent days) | Average number of treatments |
| Total | 23,188 | 781 | 22,407 | 28.7 | 757 | 3,730 | 261 | 4.0 | 3,261 | 2.3 |
| Head | 9,831 | 349 | 9,482 | 27.2 | 347 | 839 | 77 | 2.6 | 1,110 | 1.9 |
| Eye | 8,215 | 306 | 7,909 | 25.8 | 306 | 659 | 59 | 2.5 | 862 | 1.7 |
| Brain or skull | 285 | 11 | 274 | 24.9 | 10 | 33 | 5 | 4.0 | 52 | 3.0 |
| Other | 1,331 | 32 | 1,299 | 40.6 | 31 | 147 | 13 | 3.3 | 196 | 2.4 |
| Trunk | 1,265 | 150 | 1,115 | 7.4 | 146 | 1,413 | 49 | 3.5 | 193 | 2.6 |
| Chest | 365 | 62 | 303 | 4.9 | 60 | 181 | 20 | 3.3 | 47 | 2.3 |
| Back | 502 | 51 | 451 | 8.8 | 49 | 366 | 17 | 4.2 | 86 | 2.9 |
| Abdomen | 104 | 21 | 83 | 4.0 | 21 | 776 | 6 | 3.1 | 14 | 2.7 |
| Hip | 53 | 6 | 47 | 7.8 | 6 | 35 | 3 | 3.3 | 10 | 2.7 |
| Shoulder | 217 | 5 | 212 | 42.4 | 5 | 8 | 1 | 3.6 | 33 | 2.4 |
| Other | 24 | 5 | 19 | 3.8 | 5 | 47 | 2 | 3.0 | 3 | 2.4 |
| Upper extremities | 8,514 | 75 | 8,439 | 112.5 | 58 | 267 | 36 | 8.2 | 1,325 | 2.5 |
| Finger or thumb | 5,337 | 33 | 5,304 | 160.7 | 21 | 48 | 15 | 9.4 | 804 | 2.4 |
| Hand | 2,021 | 23 | 1,998 | 86.9 | 19 | 117 | 12 | 8.5 | 330 | 2.6 |
| Arm | 1,156 | 19 | 1,137 | 59.8 | 18 | 102 | 9 | 6.4 | 191 | 2.7 |
| Lower extremities | 3,148 | 198 | 2,950 | 14.9 | 198 | 1,200 | 98 | 5.7 | 600 | 3.2 |
| Toes | 389 | 24 | 365 | 15.2 | 24 | 84 | 9 | 4.0 | 70 | 3.0 |
| Foot | 1,305 | 112 | 1,193 | 10.7 | 112 | 619 | 51 | 5.3 | 252 | 3.3 |
| Leg | 1,454 | 62 | 1,392 | 22.5 | 62 | 497 | 38 | 7.0 | 278 | 3.2 |
| Multiple injuries | 46 | 9 | 37 | 4.1 | 8 | 11 | 1 | 9 | 8 | 1.6 |
| Unknown | 384 | | 384 | | | | | | 25 | 1.0 |

[1] Based on approximately 30 percent of all reported injuries.

[6] See Eye Injuries in Shipyards, in Monthly Labor Review, December 1943 (reprinted as Serial No. R. 1600).

## *Duration of Temporary Total Disabilities*

Nearly 60 percent of the entire volume of temporary total injuries recorded during the 12-month period were 1-day cases; that is, the injured persons were reported as unable to work for a period of 1 day after the day of injury. Cases involving 2, 3, and 4 days of disability each constituted slightly less than 6 percent of the total. One and 2-week cases together accounted for about 16 percent. Only 8 percent of the cases involved as much as 15 days of disability. (See table 5.)

As a result of the very high proportion of 1-day cases, the average time lost for each case of temporary total disability in this yard was only 5 days. This average is only about one-fourth as high as the average for the entire shipbuilding industry.[7]

TABLE 5.—*Temporary Total Disabilities in an East Coast Shipyard, by Nature and Location of Injury and Period of Disability, Oct. 1, 1942–Sept. 30, 1943*

| Nature and location of injury | Total number of temporary total disabilities | Number of temporary total disabilities resulting in disability of— | | | | | | | Average days lost per temporary total disability |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 day | 2 days | 3 days | 4 days | 5–9 days | 10–14 days | 15 days and over | |
| Total | 2,500 | 1,467 | 142 | 148 | 135 | 281 | 115 | 212 | 5 |
| Burns and scalds | 120 | 53 | 9 | 11 | 5 | 17 | 14 | 11 | 6 |
| Eye | 28 | 22 | 1 | 0 | 1 | 2 | 0 | 2 | 3 |
| Arm, hand, or finger | 28 | 10 | 3 | 4 | 3 | 3 | 3 | 2 | 5 |
| Leg, foot, or toe | 44 | 12 | 4 | 6 | 1 | 10 | 8 | 3 | 6 |
| Other | 20 | 9 | 1 | 1 | 0 | 2 | 3 | 4 | 13 |
| Cuts and lacerations | 113 | 68 | 5 | 9 | 3 | 13 | 6 | 9 | 4 |
| Eye | 23 | 18 | 0 | 2 | 0 | 3 | 0 | 0 | 2 |
| Arm, hand, or finger | 30 | 15 | 1 | 2 | 1 | 8 | 2 | 1 | 4 |
| Leg, foot, or toe | 41 | 21 | 4 | 4 | 2 | 1 | 4 | 5 | 6 |
| Other | 19 | 14 | 0 | 1 | 0 | 1 | 0 | 3 | 6 |
| Strains or sprains (not hernia) | 242 | 123 | 20 | 19 | 18 | 33 | 15 | 14 | 5 |
| Back | 96 | 36 | 8 | 8 | 7 | 16 | 13 | 8 | 6 |
| Trunk, other than back | 21 | 15 | 1 | 0 | 3 | 1 | 1 | 0 | 2 |
| Arm, hand, or finger | 9 | 7 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Leg, foot, or toe | 114 | 63 | 11 | 11 | 6 | 16 | 1 | 6 | 4 |
| Other | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Bruises | 399 | 274 | 33 | 18 | 17 | 30 | 8 | 19 | 3 |
| Eye | 19 | 10 | 2 | 2 | 1 | 2 | 0 | 2 | 3 |
| Head, other than eye | 57 | 43 | 5 | 2 | 4 | 1 | 0 | 2 | 2 |
| Chest | 35 | 24 | 2 | 2 | 1 | 2 | 2 | 2 | 4 |
| Back | 24 | 12 | 2 | 0 | 3 | 5 | 1 | 1 | 4 |
| Trunk, not elsewhere classified | 31 | 18 | 1 | 2 | 2 | 3 | 2 | 3 | 5 |
| Arm, hand, or finger | 39 | 28 | 4 | 2 | 2 | 2 | 1 | 0 | 2 |
| Leg, foot, or toe | 192 | 139 | 16 | 8 | 4 | 14 | 2 | 9 | 3 |
| Other | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 |
| Fractures | 63 | 30 | 2 | 2 | 2 | 7 | 7 | 13 | 10 |
| Arm, hand, or finger | 22 | 15 | 2 | 0 | 0 | 3 | 1 | 1 | 4 |
| Leg, foot, or toe | 35 | 15 | 0 | 2 | 2 | 3 | 5 | 8 | 11 |
| Other | 6 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 28 |
| Hernia | 37 | 1 | 0 | 0 | 0 | 0 | 0 | 36 | 42 |
| Industrial disease | 87 | 77 | 6 | 0 | 0 | 4 | 0 | 0 | 1 |
| Chest | 86 | 77 | 5 | 0 | 0 | 4 | 0 | 0 | 1 |
| Other | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| Welder's flash | 693 | 691 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| Dust particles in eyes | 198 | 112 | 24 | 21 | 10 | 22 | 6 | 3 | 3 |
| Not elsewhere classified | 40 | 34 | 4 | 0 | 0 | 1 | 0 | 1 | 2 |
| Unknown | 508 | 4 | 38 | 68 | 79 | 154 | 59 | 106 | 11 |

[7] The average time lost per temporary total disability, shown in previous studies covering 1941 and 1942, was 18 days for 1941 and 20 days for 1942. See Industrial Injuries in the United States During 1941, in Monthly Labor Review, September 1942; and Industrial Injuries in the United States During 1942 (Bureau of Labor Statistics Bulletin No. 758).

One of the several possible reasons suggested as an explanation of the high proportion of 1-day cases was that fatigue resulting from extended overtime or from long periods of work without a rest day might have necessitated a day for recuperation from many injuries which ordinarily would not have caused lost time. An investigation of this possibility was made by tabulating for each 1-day case the amount of time the injured employee had worked during the 2 weeks prior to his injury. This tabulation revealed no correlation between overtime or long periods of work and the occurrence of 1-day disabilities. In fact, for one department in which overtime was worked consistently, it was found that the workers who experienced 1-day disabilities generally had worked fewer hours than the average for all employees of the department. Moreover, it was found that 70 percent of the workers who had experienced 1-day disabilities had had at least 3 days off (including Sundays) during the 2 weeks prior to their injuries and that practically all had been off for at least 1 day. This tabulation also eliminated the possible explanation that there was a tendency to take advantage of a minor injury to secure a day off without thereby becoming ineligible for overtime pay for work on the following Saturday or Sunday. In most instances these workers were already ineligible, because of previous time off.

It was observed, however, that more than one-fourth of the disabling injuries in this plant were cases of welder's flash and that practically all of these were 1-day cases. This high proportion of welder's flash cases, therefore, accounted in large measure for the low average time loss for disabling injuries. However, the proportion of 1-day cases was quite high for all types of injuries.

*One-day cases.*—The relative volume of 1-day cases was comparatively high in October and November; was low in December, January, and February; climbed sharply in March; fell off slightly in April; and then rose steadily through July. The proportion was again comparatively low in August, but rose to a new high in September. It is interesting to note that the only period in which the proportion of 1-day cases remained below 55 percent for more than a single month was during the winter. The monthly proportions of 1-day cases were as follows:

| | *1-day disabling injuries as percent of all disabling injuries* | | *1-day disabling injuries as percent of all disabling injuries* |
|---|---|---|---|
| October 1942 | 58. 8 | May 1943 | 57. 6 |
| November 1942 | 59. 1 | June 1943 | 58. 1 |
| December 1942 | 49. 7 | July 1943 | 60. 3 |
| January 1943 | 52. 1 | August 1943 | 50. 9 |
| February 1943 | 50. 9 | September 1943 | 61. 1 |
| March 1943 | 58. 7 | | |
| April 1943 | 54. 8 | 12-month average | 56. 4 |

## *Seasonal Variations*

Monthly injury-frequency rates[1] for the yard formed a distinct pattern during the 12-month period of the study. In the winter months the frequency rates for both disabling and nondisabling injuries were considerably below the averages for the year. In the summer months they were correspondingly higher than the annual

[1] A frequency rate represents the average number of injuries for each million employee-hours worked.

averages. The rate of disabling injuries reached its lowest point in December, and nondisabling injuries were least frequent in January. Both rates reached their highest levels in June. (See chart and table 6.)

No fully acceptable explanation for this indication of a seasonal trend could be found. Average employment remained fairly constant in all the months studied except August and September. In these 2 months there was a slight decline in employment, accompanied by an approximately equal decline in employee-hours worked. As previous studies [2] have indicated a direct relationship between injury-frequency rates and volume of employment, this decline in employment may have had some influence upon the frequency rates for those months. However, between December and January, when the frequency rates were lowest, and June, when the rates were highest, there was only about a 1-percent difference in the total number of employees and only about a 2-percent variation in the total number of employee-hours worked. Employment variations, therefore, seem to have had little to do with the changes in injury-frequency rates.

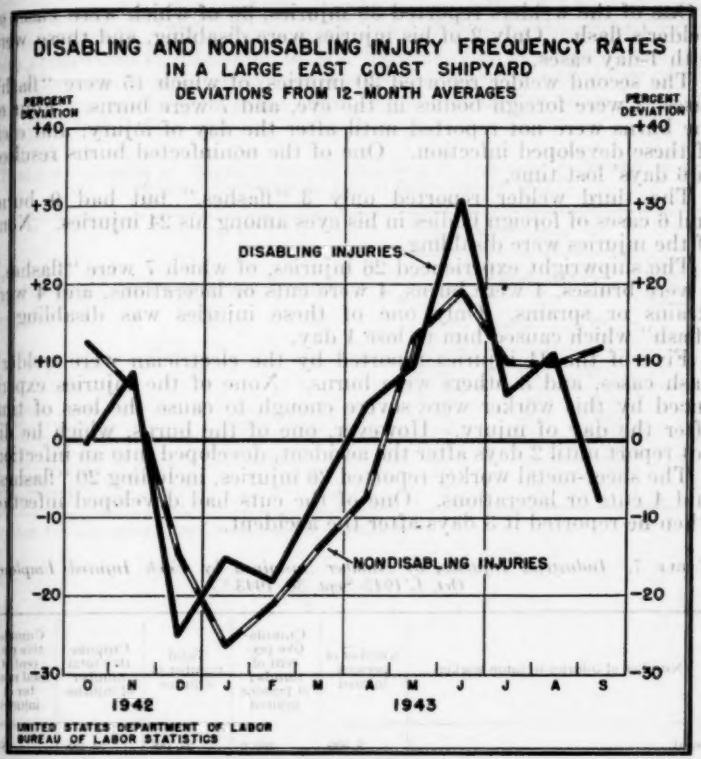
As a possible explanation it was suggested that the low frequency rates for the winter months may not represent entirely a difference in the actual volume of injuries, but may be due in part to differences in reporting resulting from a disinclination to go to the infirmary in inclement weather, to report minor injuries. As a corollary, the prospect of a short respite from the heat while visiting the infirmary may encourage the reporting of minor injuries during the summer months. This explanation may well account for the seasonal variation in reported nondisabling injuries. It may also account in part for the variation in the rate for disabling injuries, since such a large proportion of the disabling injuries were 1-day cases.

TABLE 6.—*Industrial Injuries in an East Coast Shipyard, by Month in Which Injury Occurred, Oct. 1, 1942–Sept. 30, 1943* [1]

| Month | Employee-hours worked | Number of injuries | | | Number of nondisabling injuries for every disabling injury |
|---|---|---|---|---|---|
| | | Total | Disabling | Nondisabling | |
| All months | 75,940,944 | 23,188 | 781 | 22,407 | 28.7 |
| *1942* | | | | | |
| October | 6,964,176 | 2,368 | 61 | 2,307 | 37.8 |
| November | 6,513,520 | 2,123 | 72 | 2,051 | 28.5 |
| December | 6,101,056 | 1,584 | 49 | 1,535 | 31.3 |
| *1943* | | | | | |
| January | 6,408,120 | 1,454 | 49 | 1,405 | 28.7 |
| February | 5,865,408 | 1,413 | 49 | 1,364 | 27.8 |
| March | 6,677,856 | 1,773 | 75 | 1,698 | 22.6 |
| April | 6,386,224 | 1,813 | 68 | 1,745 | 25.7 |
| May | 6,252,832 | 2,171 | 74 | 2,097 | 28.3 |
| June | 6,490,288 | 2,370 | 86 | 2,284 | 26.6 |
| July | 6,393,816 | 2,152 | 80 | 2,072 | 25.9 |
| August | 5,943,600 | 1,983 | 59 | 1,924 | 32.6 |
| September | 4,943,968 | 1,984 | 59 | 1,925 | 32.6 |

[1] Based on approximately 30 percent of all reported injuries.

[2] See Changes in Injury-Frequency Rates and Employment in Manufacturing, 1926–41, in Monthly Labor Review, May 1943 (p. 940).




## *Repeat Injuries*

No records were available from which it could be determined how many workers in the yard sustained no injuries at all during the 12-month period, nor was it feasible to analyze only the injury records of individuals who were employed throughout the entire period. The 23,188 injury cases which were studied, therefore, include the experiences of many workers who were employed for only a part of the period. These records, however, indicate the occurrence of an exceedingly high proportion of repeat injuries.

Only 8,599 individuals were involved in the 23,188 injuries which were tabulated. More than half of these workers reported 2 or more injuries in the 12-month period; nearly 11 percent had at least 6 injuries; and nearly 3 percent had 10 or more injuries. About one-fifth of all the injured persons experienced half of all the reported injuries (table 7).

Six individuals each reported 24 or more injuries. Three of these workers were welders, one worked in the sheet-metal department, one was an electrician, and one was a shipwright. All were young men, from 19 to 24 years of age.

One of the welders reported 39 injuries, 36 of which were cases of welder's flash. Only 2 of his injuries were disabling, and these were both 1-day cases.

The second welder reported 30 injuries, of which 15 were "flash" cases, 2 were foreign bodies in the eye, and 7 were burns. Four of the burns were not reported until after the day of injury, and each of these developed infection. One of the noninfected burns resulted in 6 days' lost time.

The third welder reported only 3 "flashes," but had 9 burns and 6 cases of foreign bodies in his eyes among his 24 injuries. None of the injuries were disabling.

The shipwright experienced 26 injuries, of which 7 were "flashes," 7 were bruises, 4 were burns, 4 were cuts or lacerations, and 4 were strains or sprains. Only one of these injuries was disabling—a "flash" which caused him to lose 1 day.

Five of the 24 injuries reported by the electrician were welder's flash cases, and 8 others were burns. None of the injuries experienced by this worker were severe enough to cause the loss of time after the day of injury. However, one of the burns, which he did not report until 2 days after the accident, developed into an infection.

The sheet-metal worker reported 26 injuries, including 20 "flashes" and 4 cuts or lacerations. One of the cuts had developed infection when he reported it 3 days after the accident.

TABLE 7.—*Industrial Injuries, by Number Sustained by Each Injured Employee, Oct. 1, 1942–Sept. 30, 1943* [1]

| Number of injuries to same worker | Number of persons injured | Cumulative percent of number of persons injured | Total number of injuries | Cumulative total number of injuries | Cumulative percent of total number of injuries |
|---|---|---|---|---|---|
| Total | 8,599 | 100.0 | 23,188 | 23,188 | 100.0 |
| 20 injuries and over | 13 | .2 | 319 | 319 | 1.4 |
| 15 and less than 20 injuries | 45 | .7 | 738 | 1,057 | 4.6 |
| 10 and less than 15 injuries | 182 | 2.8 | 2,059 | 3,116 | 13.4 |
| 9 injuries | 103 | 4.0 | 927 | 4,043 | 17.4 |
| 8 injuries | 122 | 5.4 | 976 | 5,019 | 21.6 |
| 7 injuries | 184 | 7.5 | 1,288 | 6,307 | 27.2 |
| 6 injuries | 283 | 10.8 | 1,698 | 8,005 | 34.5 |
| 5 injuries | 432 | 15.9 | 2,160 | 10,165 | 43.8 |
| 4 injuries | 644 | 23.4 | 2,576 | 12,741 | 54.9 |
| 3 injuries | 1,051 | 35.6 | 3,153 | 15,894 | 68.5 |
| 2 injuries | 1,754 | 56.0 | 3,508 | 19,402 | 83.7 |
| 1 injury | 3,786 | 100.0 | 3,786 | 23,188 | 100.0 |

[1] Based on sample of employees who experienced approximately 30 percent of all reported injuries.

## *Infections*

It is axiomatic in medical and safety departments that prompt medical attention to minor injuries prevents infection. Despite all efforts to obtain prompt reporting, however, many minor cases are ignored or are given unskilled first-aid treatment by the injured person himself or by one of his coworkers. A high proportion of these injuries develop infections.

Of the 23,188 cases studied in this survey, 18,568 were reported to the medical department on the day of injury. Only 86, or one-half of 1 percent, of these developed infection. Of the 3,466 cases, which

were reported on the day following the injury, 225 or 6.5 percent developed infection. Two days' delay in reporting for treatment raised the proportion of infections to 27.1 percent; 3 days' delay raised it to 32.9 percent; 4 days' delay raised it to 37.9 percent; and delay of 5 or more days resulted in more than 40 percent of the cases becoming infected (table 8).

TABLE 8.—*Percent of Shipyard Injuries Resulting in Infection, by Number of Days Before First Treatment, Oct. 1, 1942–Sept. 30, 1943* [1]

| Number of days elapsed before first treatment | Number of injuries | | | Percent of injuries resulting in infection |
|---|---|---|---|---|
| | Total | Resulting in— | | |
| | | Infection | Non-infection | |
| Total | 23,188 | 686 | 22,502 | 3.0 |
| No days | 18,568 | 86 | 18,482 | .5 |
| 1 day | 3,466 | 225 | 3,241 | 6.5 |
| 2 days | 560 | 152 | 408 | 27.1 |
| 3 days | 216 | 71 | 145 | 32.9 |
| 4 days | 116 | 44 | 72 | 37.9 |
| 5–9 days | 175 | 76 | 99 | 43.4 |
| 10 days and over | 87 | 32 | 55 | 36.8 |

[1] Based on approximately 30 percent of all reported injuries.

# Sources of Wartime Labor Supply in the United States[1]


## *Summary*

SINCE the beginning of the National Defense Program in mid-1940, the number of persons employed in civilian jobs or in the armed forces has increased by more than 16 million. About 7 million of the wartime gain in civilian employment and military strength was accomplished through the employment of persons who were unemployed in 1940 and the remaining 9 million was made possible by increases in the size of the total labor force. On the basis of pre-war trends the labor force would have been expected to increase by only about 2½ million between 1940 and 1944. The gain of 6½ million above this expected or "normal" increase represents persons who, in ordinary times, would be students, housewives, retired workers, or others not working or seeking work in paid employment.

Youths of school and college age have been the largest single source of additional wartime labor supply, accounting for more than 3 million or approximately half of the extra workers in the labor force. Although many of these are working only part time while continuing to attend school, civilian attendance at schools and colleges is about 2,000,000 below the level expected on the basis of pre-war trends, and there is a serious educational deficit among persons now in their teens and early twenties.

A second major pool of wartime labor has been supplied by women over the age of 35 who have increased their labor-market participation by about 1½ million in excess of peacetime expectations. The extra workers in this group were recruited mainly from among married women who have no children or whose children are past the age where they require full-time care on the part of the mother. The number of workers among women between the ages of 20 and 35, on the other hand, has exceeded peacetime expectations by a relatively small margin. Not only has recruitment of young women been limited by their responsibility for the care of young children, but also many young women have dropped out of the labor market as the result of the dependency features of Selective Service regulations and wartime increases in marriage and birth rates. If it were not for an abnormally high proportion of workers among young women whose husbands are in the armed forces, the number of women between 20 and 35 in the wartime labor force would probably be somewhat below the level expected on the basis of pre-war trends.

Adult men have contributed approximately 1½ million extra workers to the wartime labor supply and these are about equally divided between men from the "fringes" of the labor market and men who, in normal times, would be retired. Those from the "fringes" of the market are men who ordinarily seek work only occasionally or intermittently and men of doubtful employability who had given up the search for a job after failing to measure up to the relatively rigid requirements of the pre-war labor market. The older men in the wartime labor market also include a considerable number who have continued working beyond the age when they ordinarily would have


[1] Prepared in the Bureau's Occupational Outlook Division by Leonard Eskin.

retired. Although pre-war trends toward earlier retirement would normally have led to a decline in the rate of labor-market participation among older men between 1940 and 1944, there was actually a considerable increase during this period.

## *Trends in the Labor Force Since 1940*

In the spring of 1940, just prior to the beginning of the National Defense Program, there were close to 54 million persons in the American labor force, including 45½ million employed in civilian jobs, ½ million in the armed forces, and almost 8 million unemployed.[2] Outside the labor force, there were in the noninstitutional population 14 years of age and over approximately 46½ million persons (9½ million men and 37 million women), including 30 million homemakers, 9½ million students, 5 million persons unable to work, and 2 million in other nonworking categories. The changes in the labor force from the predefense period to the current period of full-scale war activity may be summarized conveniently by analysis of the four 12-month intervals beginning with April 1940 when the Decennial Census was taken [3] and the current Monthly Report on the Labor Force was initiated.[4]

### APRIL 1940–APRIL 1941

The first period, from April 1940 to April 1941, was marked by the beginning and initial expansion of the National Defense Program and the passage of the Selective Service Act. Aggregate civilian employment and military strength rose by 2¾ million (table 1) as unemployment was reduced by 2 million and the labor force increased by three-fourths of a million. Although this increase in the size of the total labor force was approximately in line with normal expectations, there were significant deviations from the "normal" trend among both men and women (chart 1).

The number of men in the labor force increased by almost a million or about 600,000 in excess of normal expectations. Most of the abnormal increase occurred among young men under 25, indicating a tendency to leave school earlier as jobs became more plentiful. In addition, the gain of a million in the net strength of the armed forces during this period no doubt involved the recruitment of some young men who, otherwise, would have remained in school.

Among women there was actually a decline of 200,000 in labor-force participation between April 1940 and April 1941, whereas an increase of more than 300,000 would have been expected normally. A major reason for the withdrawal of women from the labor market during this period was the rise in marriage and birth rates accompanying improved economic conditions. In addition, gains in family income probably accounted for some withdrawals from the labor market among women who had sought or obtained jobs in order to increase the family income during the depression.

[2] Unemployment in April 1940 was estimated at 7.8 million persons of whom approximately 2.9 million were on public emergency work (WPA, etc.) and 4.9 million were seeking work.

[3] The labor-force data in the Decennial Census actually referred to the last week in March 1940. Subsequent to that date, however, the Census Bureau's Monthly Report on the Labor Force referred to the week containing the 8th of each month rather than to the last week in the month. For purposes of comparability, therefore, the analysis will be based on the figures for April of 1940 and April of each subsequent year.

[4] The Monthly Report on the Labor Force, which is taken on a sample basis each month, was initiated by the Work Projects Administration and taken over in 1942 by the Bureau of the Census. Recent revisions in both the Decennial Census data and the Monthly Report data have made the two comparable as far as possible. (See Census Bureau releases P-44, No. 6, and MRLF No. 22.)

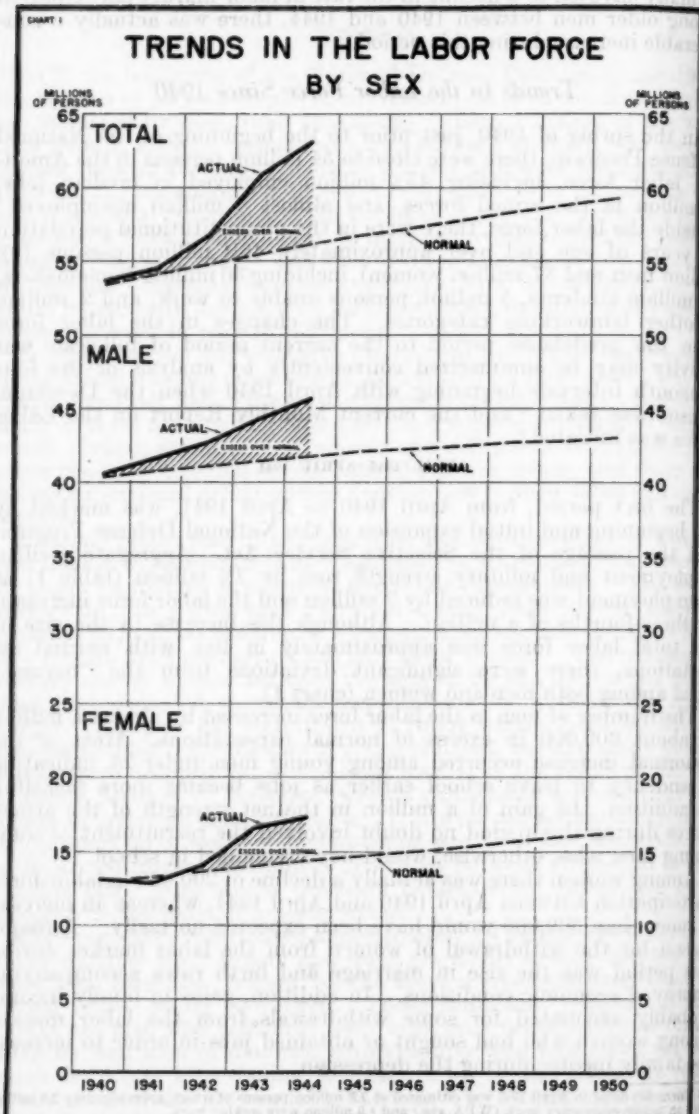


CHART I
TRENDS IN THE LABOR FORCE
BY SEX
MILLIONS OF PERSONS
MILLIONS OF PERSONS
TOTAL
ACTUAL
NORMAL
MALE
ACTUAL
NORMAL
FEMALE
ACTUAL
NORMAL
65
60
55
50
45
40
35
30
25
20
15
10
5
0
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Another factor contributing to the decline in the female labor force during the first year of the Defense Program was the introduction and passage of the Selective Service Act. The extent to which the act directly caused women to leave their jobs in order to be considered dependent on their husbands is, of course, a matter of conjecture. Insofar as the act operated to increase marriage and birth rates, however, it no doubt exerted an indirect influence in causing some women to leave the labor force. There is a striking relationship between the timing of the introduction and passage of the Selective Service Act and the timing of movements in marriage and birth rates. Marriages (seasonally adjusted annual rate) rose from 9.6 per 1,000 of population in May 1940 to 14.1 in June when the Selective Service bill was introduced in Congress. The rate dropped to 12.0 in July, but surged to a peak of 14.7 in September when the measure became law. Birth rates followed the same pattern, with a lag of 10 months, the peaks coming in April and July of 1941.[5]

TABLE 1.—*Sources of Increase in Civilian Employment and Armed Forces, April 1940–April 1944* [1]

| Period and sex | Increase in civilian employment and armed forces (in thousands) | | | Sources of increase (in thousands) | |
|---|---|---|---|---|---|
| | Total | Civilian employment | Armed forces | Decrease in unemployment | Increase in the labor force |
| Total, 4-year period | 16,170 | [2] 5,580 | 10,590 | 7,030 | [2] 9,140 |
| April 1940–April 1941 | 2,750 | 1,770 | 980 | 1,990 | 760 |
| April 1941–April 1942 | 5,390 | 3,830 | 1,560 | 3,070 | 2,320 |
| April 1942–April 1943 | 5,910 | 480 | 5,430 | 1,790 | 4,120 |
| April 1943–April 1944 | 2,120 | [3]−500 | 2,620 | 180 | [3] 1,940 |
| Males, 4-year period | 10,390 | [2]−10 | 10,400 | 5,530 | [2] 4,860 |
| April 1940–April 1941 | 2,650 | 1,670 | 980 | 1,690 | 990 |
| April 1941–April 1942 | 3,450 | 1,900 | 1,550 | 2,420 | 1,030 |
| April 1942–April 1943 | 3,000 | −2,350 | 5,350 | 1,370 | 1,630 |
| April 1943–April 1944 | 1,290 | [3]−1,230 | 2,520 | 80 | [3] 1,210 |
| Females, 4-year period | 5,780 | 5,590 | 190 | 1,500 | 4,280 |
| April 1940–April 1941 | 100 | 100 | ---------- | 330 | −230 |
| April 1941–April 1942 | 1,940 | 1,930 | 10 | 650 | 1,290 |
| April 1942–April 1943 | 2,910 | 2,830 | 80 | 420 | 2,490 |
| April 1943–April 1944 | 830 | 730 | 100 | 100 | 730 |

[1] Sources: (1) Civilian employment—Bureau of the Census, Monthly Report on the Labor Force; (2) Armed forces—Bureau of Labor Statistics and War Manpower Commission.

[2] Net change computed on the basis of April 1944 totals adjusted to exclude an estimated 200,000 persons on temporary jobs who were included in the Census enumeration for April 1944 because the Census week coincided with Easter week. Adjustments were made on the basis of interpolations between March and May and experience in previous years.

### APRIL 1941–APRIL 1942

The period from April 1941 to April 1942 saw the rapid expansion of the National Defense Program and the transition to an actual war program after the Japanese attack on Pearl Harbor in December 1941. A sharp employment increase in defense and war activities—munitions manufacturing, transportation, the Federal Government—was accompanied by gains in the consumer goods and service industries, in which employment was stimulated to record peaks by the rising volume of consumer purchasing power. Total civilian employment

[5] American Journal of Sociology, November 1942: The Impact of the War on Population and Vital Phenomena, by Philip M. Hauser. Marriage rates quoted are based on 16 States for which monthly data are available.

rose by almost 4 million—the largest 12-month increase ever recorded in the United States—and at the same time some 1½ million men were added to the armed forces. Reductions in unemployment accounted for 3.1 million of the total gain of 5.4 million in civilian employment and military strength, while increases in the labor force contributed 2.3 million.

During 1941 the female labor force recouped the losses sustained in 1940 and the male labor force continued to increase at a rate somewhat in excess of "normal." At the time of the attack on Pearl Harbor the number of women in the labor force was approximately in line with normal expectations and the number of men was about a million over "normal." By April 1942 the female labor force exceeded the normal level by almost half a million and the number of extra workers in the male labor force had grown to 1½ million.

Among the women there were approximately 700,000 extra workers, divided equally between girls under 20 years of age and women over 35. This was partially offset, however, by a deficit in the 20–34 group which was still 200,000 below "normal," as a result of the withdrawals during 1940 and a continued upward movement in marriage and birth rates.

Approximately 600,000 of the 1.5 million extra males in the April 1942 labor force were under 20 years of age, 200,000 were between 20 and 25, and the remaining 700,000 were spread fairly evenly throughout the age range over 25.

### APRIL 1942–APRIL 1943

The mobilization of manpower for the war effort proceeded at top speed during the interval from April 1942 to April 1943 and a large part of the total mobilization to date was concentrated within that period. Approximately 5½ million persons were added to the armed forces alone. Although the net increase in total civilian employment was only half a million, there was an extensive "reshuffling" of workers within the civilian economy. The munitions industries and Government war agencies experienced their most rapid expansion during this period—an expansion which was supplied largely through shifting of workers from employment in other fields, particularly construction, agriculture, trade, and service.

The unemployed had supplied 5 million of the 8 million increase in aggregate civilian employment and military strength during the 2 years ending April 1942. Thereafter, new recruits to the labor force became the main source of labor supply, accounting for more than 4 million out of the 6 million increase that occurred between April 1942 and April 1943. The remainder of the gain in civilian employment and military strength was supplied through a reduction of 1.8 million in unemployment, which fell to a near-minimum level of less than 1 million persons and most of these were in the process of changing jobs.

Even more unusual than the unprecedented mobilization of 5½ million men for the armed forces during the interval between April 1942 and April 1943 was the addition of 2¼ million women to the labor force. The magnitude of an increase of this size in the course of a single year can perhaps be better understood when it is considered that it is approximately equal to the gain in the female labor force during the entire decade from 1930 to 1940.

The greatest contribution to the record-breaking increase in the female labor force was made by women over the age of 35. Labor-force participation in this group increased by 1.3 million, or about 1.1 million in excess of normal expectations. Teen-age girls accounted for more than half of the remaining gain in excess of "normal," but there was also a substantial increase in the 20–34 age group which rose to a level above "normal" for the first time since 1940. Altogether, the increase in female workers during this period exceeded normal expectations by about 2.1 million, bringing the total number of extra women workers in the labor market to 2.6 million in April 1943.

The male labor force also experienced its greatest gains during this period. An increase of 1.6 million—about 1.2 million over "normal"—brought the total number of extra male workers to 2.7 million. Three-fourths of the abnormal increment took place in the youngest and oldest age groups, the number of teen-age boys in the labor market increasing by 500,000 in excess of normal expectations and the number of men over 55 by 400,000.

### APRIL 1943–APRIL 1944

By the autumn of 1943 the broad objectives for mobilization of manpower in civilian industries had virtually been attained. After reaching a peak in November, munitions employment started on the downgrade and, by April 1944, was slightly under the April 1943 level. This decline was made possible not only by decreases in requirements for certain munitions items, but also by increases in efficiency and labor utilization resulting from greater experience with production methods and labor-market controls. Total production of munitions was maintained at approximately peak levels even after employment turned downward.

As total manpower objectives were approached, the principal problem shifted from one of general nation-wide mobilization to one of meeting labor shortages in local centers of war production and in certain industries where wages or working conditions are unfavorable or where able-bodied men are required. Up to the end of 1942 the number of men in civilian jobs had been maintained well above the 1940 level, for the number of unemployed men and new male workers taking jobs had been more than enough to offset withdrawals to the armed forces. With the reserves of unemployed men just about depleted, however, the needs of the military ate into the ranks of male civilian workers throughout 1943 and the first part of 1944. In April 1944 the number of men in civilian jobs was approximately the same as in April 1940. Thus, the net increase of 5½ million in civilian employment since 1940 had been accounted for entirely by women. In addition, some 200,000 women had been added to the armed forces (table 1).

The only substantial demands for additional manpower between April 1943 and April 1944 came from the armed forces which expanded by 2.6 million. This expansion was made possible by an increase of 1.9 million in the labor force and decreases of 500,000 in civilian employment and 200,000 in unemployment. The major part of the gain in the labor force took place among men, who increased by 1.2 million or about 900,000 above normal expectations. Men under 45

years of age accounted for all of the abnormal increase, 600,000 of the gain being concentrated among boys under 20, particularly the 18- and 19-year-olds who had become liable for military service at the end of 1942. Teen-age boys entered the armed forces in large numbers between April 1943 and April 1944 as limitations were placed on draft deferments, first for nonfathers under the age of 26 and later for all persons under the age of 22. High-school enrollment of boys aged 18 and over which had declined by less than 50,000 between the school years of 1939–40 and 1942–43 dropped by 200,000 between 1942–43 and 1943–44.[6] Similarly, the number of civilian men enrolled in college declined by only 140,000 between the autumns of 1939 and 1942, and then fell by more than 400,000 in the following year.[7]

The increase in the female labor force between April 1943 and April 1944 exceeded normal expectations by 400,000 and virtually all of this abnormal gain was accounted for by women between 20 and 25 years of age. This reflected the drafting of married men on a large scale as the pool of physically fit men without dependents and with no occupational deferments was exhausted. By April 1944 there were about 3 million women in the United States with husbands absent in the armed forces.[8] Many young married women who would normally have quit work or remained outside the labor force found it necessary to continue working or to take jobs when their husbands entered military service.

## *Characteristics of Extra Workers in the Labor Force, April 1944*[9]

Altogether, the increase in the labor force during the 4 years ending in April 1944 exceeded normal expectations by 6.7 million. For purposes of convenience in describing their characteristics, the extra workers may be divided into the following groups:

| | | Number[1] (in millions) |
|---|---|---|
| All groups | Normally students, housewives, retired or others not working or seeking work in paid employment | 6.7 |
| Boys and girls, 14–19 | Mostly from school and college | 2.8 |
| Young men, 20–24 | Mostly from college | .5 |
| Young women, 20–24 | Mostly service wives | .4 |
| Women, 35–64 | Mostly married women with no young children | 1.5 |
| Men, 25–54 | Mostly from the "fringes" of the labor market | .7 |
| Men, 55 and over | Mostly persons who have postponed retirement | .8 |

[1] These data are not comparable to similar data appearing in the August 1943 and February 1944 issues of the Monthly Labor Review. See prefatory note to table 2.

More detailed information classified by age and sex is given in chart 2 and tables 2 and 6.

[6] U. S. Office of Education Circular No. 227: Some Effects of the War on Public Schools, 1942–43 and 1943–44, by Emory M. Foster. Washington, 1944.

[7] U. S. Office of Education Circular No. 228: Effects of the War upon Colleges, 1943–44, by Henry G. Badger and Benjamin W. Frazier. Washington, 1944.

[8] A Census Bureau sample survey taken in February 1944 found 2,760,000 women in the United States with husbands absent in the armed forces. See Census release P-S, No. 1.

[9] This section will be confined to a description of the characteristics of the extra workers in the labor force. For a brief discussion of the extent to which these workers represent temporary or permanent additions to the labor force, see Factors Determining Post-War Job Transfers and Unemployment, in Monthly Labor Review, February 1944 (p. 272).

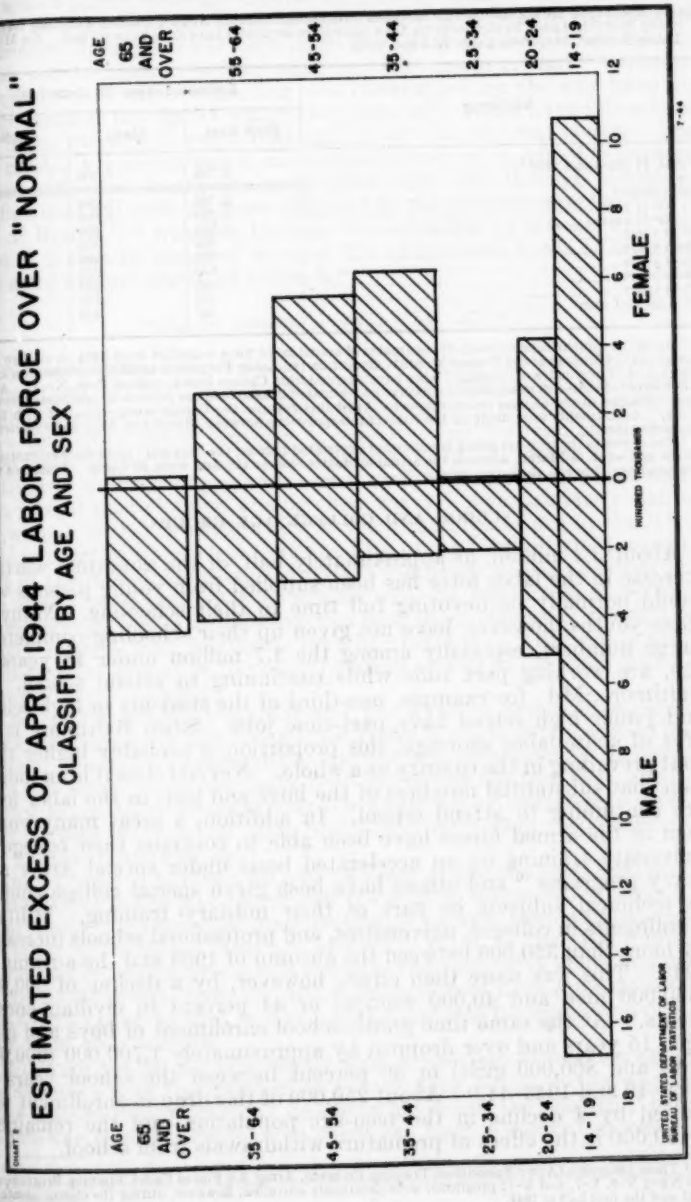


CHART 2
ESTIMATED EXCESS OF APRIL 1944 LABOR FORCE OVER "NORMAL"
CLASSIFIED BY AGE AND SEX
AGE
65 AND OVER
55-64
45-54
35-44
25-34
20-24
14-19
MALE
FEMALE
HUNDRED THOUSANDS
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
7-44

TABLE 2.—*Estimated Excess of April 1944 Labor Force over "Normal," Classified by Age and Sex* [1]

[Data in this table are not comparable to similar data appearing in the August 1943 and February 1944 issues of the Monthly Labor Review because basic labor-force estimates have since been revised. See Monthly Labor Review, May 1944, pages 1118 and 1119]

| Age group | Estimated excess (in thousands) | | |
|---|---|---|---|
| | Both sexes | Males | Females |
| Total, 14 years and over [2] | 6,700 | 3,700 | 3,000 |
| 14–19 years [3] | 2,760 | 1,690 | 1,070 |
| 14–17 years | 1,730 | 1,090 | 640 |
| 18–19 years | 1,030 | 600 | 430 |
| 20–24 years | 930 | 510 | 420 |
| 25–34 years | 210 | 200 | 10 |
| 35–44 years | 840 | 210 | 630 |
| 45–54 years | 840 | 280 | 560 |
| 55–64 years | 670 | 390 | 280 |
| 65 years and over | 450 | 420 | 30 |

[1] Based on comparisons between (1) estimates of actual labor force compiled from data on civilian labor force from the Bureau of the Census Monthly Report on the Labor Force plus unofficial estimates of armed forces; and (2) estimates of "normal" labor force adapted from Census Bureau release P–44, No. 12. Actual labor-force estimates were adjusted to exclude an estimated 200,000 teen-age persons on temporary jobs who were included in the Census enumeration for April 1944 because the Census week coincided with Easter week. Adjustments were made on the basis of interpolations between March and May and experience in previous years.

[2] The excess in the teen-age group is somewhat overstated because the "normal" labor-force estimates refer to the last week in March, whereas the actual estimates refer to the first week in April. There is a slight seasonal rise between these two weeks.

## SCHOOL AND COLLEGE AGE GROUPS

About 3.3 million, or approximately half, of the abnormal wartime increase in the labor force has been supplied from young persons who would normally be devoting full time to their schooling. Many of these youths, however, have not given up their schooling completely. Large numbers, especially among the 1.7 million under 18 years of age, are working part time while continuing to attend school. In Baltimore, Md., for example, one-third of the students in high school and junior high school have part-time jobs. Since Baltimore is an area of acute labor shortage, this proportion is probably higher than that prevailing in the country as a whole. Nevertheless it is an indication that substantial numbers of the boys and girls in the labor force are continuing to attend school. In addition, a great many young men in the armed forces have been able to continue their college or university training on an accelerated basis under special Army and Navy programs [10] and others have been given special college courses in technical subjects as part of their military training. Military enrollments in colleges, universities, and professional schools increased by more than 350,000 between the autumn of 1939 and the autumn of 1943. This was more than offset, however, by a decline of 600,000 (560,000 men and 40,000 women) or 44 percent in civilian enrollments.[11] At the same time public-school enrollment of boys and girls aged 15 years and over dropped by approximately 1,700,000 (900,000 boys and 800,000 girls) or 30 percent between the school years of 1939–40 and 1943–44.[11] About 250,000 of this drop in enrollment was caused by a decline in the teen-age population and the remaining 1,450,000 is the effect of premature withdrawals from school.

[10] These programs (Army Specialized Training Program, Army Air Forces Cadet Training Program, and the Navy V–5, V–7, and V–12 programs) were drastically curtailed, however, during the closing months of 1943 and the first half of 1944.

[11] See sources cited in footnotes 6 and 7.

Although many of the youths who took jobs in industry or entered the armed forces were not cut off completely from formal education, it can be seen that the drop in high-school and college enrollments occasioned by the war has been large enough to cause a serious educational deficit among persons now in their teens or early twenties. Many of those whose schooling was interrupted by the war have already reached the age at which they normally would have left school and many others will reach that age by the time the war is over. For this reason it is important to encourage the return to school of persons whose education has been interrupted, not only through measures for financial aid such as those included in the recently enacted "G. I. Bill of Rights," [12] but also through the adoption by schools and colleges of programs designed to meet the educational needs of an older and more mature group of students.

### WOMEN UNDER 35 YEARS OF AGE [13]

The labor-market activity of women between the ages of 20 and 35 has been affected by a variety of offsetting factors. On the one hand, general gains in family income, increases in marriage and birth rates, and dependency features of Selective Service regulations have acted as a check on their participation. On the other hand, the drafting of millions of young married men has caused an abnormally high rate of participation among their wives. Approximately half of the women with husbands away in the armed forces are in the labor force as compared with less than one-fifth of the other married women. Part of this difference is caused by the relatively young age distribution of service wives; but even age for age, the proportion of workers among service wives is between two and three times the proportion among women with husbands present (table 3). This relationship holds true for women with young children as well as for those without young children (table 4).

The easy availability of jobs and the wartime pressure to recruit women workers have also brought a number of single young women into the labor market who normally would not seek employment. Increases from this source, however, have been limited by the fact that, even in normal times, there are relatively few single young women who do not work or seek work when their health and household responsibilities will permit them to do so.

Among women between 20 and 25 years of age the participation of service wives in the labor force and the wartime pressures to enter the labor market, if household responsibilities permit, have overbalanced the effect of increased marriage and birth rates, so that the number of workers in this group exceeds normal expectations by about 400,000. In the 25–34 group, however, the various factors have approximately offset each other, so that in April 1944 there was no significant deviation from the "normal."

If it were not for an abnormally high proportion of workers among the service wives, the number of women aged 20–34 in the wartime labor market would probably be somewhat below the "normal" based on pre-war trends. Since 1940 there has been a marked increase in

[12] Public Law 346, 78th Congress, 2d Session, approved June 22, 1944. For summary, see page 383.

[13] This section is based largely on an unpublished memorandum by Lester M. Pearlman of the Bureau of Labor Statistics.

the proportion of young women who are married, and, in view of the rise in birth rates,[14] this has no doubt been accompanied by a similar increase in the proportion with young children. Table 5 shows comparative figures on marital status of young women in April 1940 and February 1944.

TABLE 3.—*Women in the Civilian Labor Force, by Marital Status and Age, March 1940 and February 1944* [1]

| Age group | All women [2] | | Single | | Married [3] | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 1944 [4] | | |
| | 1940 | 1944 [4] | 1940 | 1944 [4] | 1940 total | Total | Husband present | Husband absent in armed forces |
| | Number (in thousands) | | | | | | | |
| Total, 14 years and over | 13,008 | 16,630 | 6,377 | 6,940 | 3,919 | 6,790 | 5,410 | 1,380 |
| 14–19 years | 1,396 | 2,130 | 1,307 | 1,930 | 61 | 190 | (5) | (5) |
| 20–24 years | 2,608 | 3,130 | 2,052 | 2,110 | 492 | 900 | 400 | 500 |
| 25–34 years | 3,593 | 3,860 | 1,615 | 1,380 | 1,428 | 2,020 | 1,410 | 610 |
| 35–44 years | 2,488 | 3,600 | 694 | 830 | 1,075 | 2,010 | 1,880 | 130 |
| 45 years and over | 2,833 | 3,910 | 709 | 690 | 863 | 1,670 | 1,650 | (5) |
| | Labor-force-participation rates (percent) [6] | | | | | | | |
| Total, 14 years and over | 25.8 | 31.8 | 45.5 | 54.9 | 13.8 | 21.6 | 18.9 | 93.0 |
| 14–19 years | 18.9 | 30.6 | 19.7 | 31.3 | 9.3 | 25.7 | (5) | (5) |
| 20–24 years | 45.6 | 52.3 | 73.1 | 86.1 | 17.3 | 27.1 | 17.3 | 93.0 |
| 25–34 years | 33.3 | 35.4 | 78.9 | 84.1 | 18.1 | 23.6 | 19.0 | 94.0 |
| 35–44 years | 27.2 | 36.5 | 73.4 | 80.6 | 15.3 | 25.9 | 25.1 | 96.1 |
| 45 years and over | 16.4 | 21.0 | 45.7 | 50.7 | 8.6 | 15.1 | 15.0 | (7) |

[1] Source: (1) March 1940—16th Population Census, 1940, The Labor Force (Sample Statistics), Employment and Personal Characteristics; (2) February 1944—Bureau of the Census, Monthly Report on the Labor Force.

[2] Includes approximately 2.7 million women in 1940 and 2.9 million in 1944 in marital status categories (widowed, divorced, separated, and married with civilian husband absent) not shown separately in table.

[3] In 1940, "married" includes only married women with husbands present in the household. In 1944 this category also includes married women with husbands absent in the armed forces. There are no available data on the number of women whose husbands were absent in the armed forces in 1940, but the number was not great enough to affect the figures significantly.

[4] The 1944 data presented in this table are based on a small cross-section of the population and are subject to a certain amount of sampling error. In general, estimates for categories containing 1,000,000 persons or more are subject to rather small sampling error and may be considered a reliable indication of the number of persons in these categories. On the other hand, the estimates for categories containing fewer than 1,000,000 persons are subject to larger sampling errors and should be interpreted as indicating only general relationships among the characteristics shown. The error that may be expected is proportionately largest for those categories having the smallest numbers.

[5] Number of persons in these categories too small to permit estimate on basis of 1944 sample statistics.

[6] Labor force as a percent of population. Rates for 1940 are based on total population, whereas rates for 1944 are based on the noninstitutional civilian population. Differences resulting from this incomparability, however, are insignificant.

This shift in marital status and the concomitant rise in birth rates would normally have caused a considerable reduction in the number of young women in the labor market, because of the obvious fact that most women do not ordinarily continue to work outside the home after they are married and the great majority of those who do continue to work do so only until they have children. In the age group 25–34, for example, the proportion of workers among single women in 1940 was 78.9 percent as compared with 33.4 percent among

[14] The birth rate in the United States rose from 17.9 per 1,000 of population in 1940 to 21.9 per 1,000 of population in 1943. (See Bureau of the Census: Vital Statistics—Special Reports, Vol. 19, No. 1, December 21, 1943; and Monthly Vital Statistics Bulletin, February 24, 1944.)

TABLE 4.—*Married Women Aged 18–64 in the Civilian Labor Force, by Age and Dependency Status, March 1940 and February 1944* [1]

| Age group | All married women, 18–64 [2] | | | | Without children under 10 | | | | With children under 10 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1940 [3] total | 1944 [4] | | | 1940 total | 1944 [4] | | | 1940 total | 1944 [4] | | |
| | | Total | Husband present | Husband absent in armed forces | | Total | Husband present | Husband absent in armed forces | | Total | Husband present | Husband absent in armed forces |
| | Number (in thousands) | | | | | | | | | | | |
| Total, 18–64 years | 3,671 | 6,700 | 5,340 | 1,360 | 2,838 | 5,230 | 4,150 | 1,080 | 833 | 1,470 | 1,190 | 280 |
| 18–24 years | 521 | 1,070 | 470 | 600 | 403 | 800 | 330 | 470 | 118 | 270 | 140 | 130 |
| 25–34 years | 1,375 | 2,020 | 1,410 | 610 | 926 | 1,310 | 840 | 470 | 449 | 710 | 570 | 140 |
| 35–44 years | 1,018 | 2,010 | 1,880 | 130 | 795 | 1,610 | 1,490 | 120 | 223 | 400 | 390 | (5) |
| 45–64 years | 757 | 1,600 | 1,580 | (5) | 714 | 1,510 | 1,490 | (5) | 43 | (5) | (5) | (5) |
| | Labor-force-participation rates (percent) [6] | | | | | | | | | | | |
| Total, 18–64 years | 13.8 | 22.7 | 19.9 | 50.6 | 17.7 | 30.0 | 26.1 | 71.1 | 7.8 | 12.1 | 10.9 | 23.9 |
| 18–24 years | 15.6 | 27.2 | 17.7 | 46.9 | 27.3 | 51.0 | 38.4 | 66.2 | 6.4 | 11.4 | 7.8 | 22.8 |
| 25–34 years | 17.4 | 23.6 | 19.0 | 54.0 | 33.4 | 49.6 | 41.0 | 79.7 | 8.8 | 12.0 | 10.6 | 25.9 |
| 35–44 years | 14.6 | 26.1 | 25.1 | 56.5 | 19.7 | 34.9 | 33.6 | 66.7 | 7.6 | 12.9 | 12.8 | (5) |
| 45–64 years | 9.0 | 17.1 | 17.0 | (5) | 9.2 | 17.6 | 17.4 | (5) | 5.9 | (5) | (5) | (5) |

[1] Source: (1) March 1940—16th Population Census, 1940, The Labor Force (Sample Statistics): Employment and Family Characteristics of Women; (2) February 1944—Bureau of the Census, Monthly Report on the Labor Force.
[2] See table 3, footnote 3.
[3] Figures differ slightly from corresponding figures in table 3, since the data are based on different samples. For a description of the two samples, see 16th Population Census, 1940, Employment and Family Characteristics of Women, pp. 7 and 8.
[4] Data for 1944 are based on a small cross section of the population; see table 3, footnote 4.
[5] Number of persons in these categories too small to permit estimate on basis of 1944 sample statistics.
[6] See table 3, footnote 6.

TABLE 5.—*Marital Status of Women Aged 20–34 Years,*[1] *April 1940 and February 1944*

| Marital status | Number of women (in thousands) aged— | | | | Percentage distribution | | | |
|---|---|---|---|---|---|---|---|---|
| | 20–24 years | | 25–34 years | | 20–24 years | | 25–34 years | |
| | 1940 | 1944 | 1940 | 1944 | 1940 | 1944 | 1940 | 1944 |
| Total | 5,895 | 5,980 | 10,818 | 10,900 | 100.0 | 100.0 | 100.0 | 100.0 |
| Single | 2,781 | 2,440 | 2,050 | 1,640 | 47.2 | 40.8 | 18.9 | 15.0 |
| Married, total | 3,026 | 3,470 | 8,341 | 8,910 | 51.3 | 58.0 | 77.1 | 81.7 |
| Husband present | 2,850 | 2,310 | 7,933 | 7,430 | 48.3 | 38.6 | 73.3 | 68.1 |
| Husband absent, in armed forces | (2) | 1,020 | (2) | 1,130 | (2) | 17.1 | (2) | 10.4 |
| Husband absent, other reasons | 176 | 140 | 408 | 350 | 3.0 | 2.3 | 3.8 | 3.2 |
| Widowed and divorced | 88 | 70 | 427 | 350 | 1.5 | 1.2 | 3.9 | 3.2 |

[1] Source: Census Bureau Release P8—No. 1. Figures for 1940 refer to the total population, whereas figures for 1944 refer only to the civilian noninstitutional population. The exclusion of the relatively small number of women in the armed forces and in institutions, however, does not significantly affect the general comparisons shown.
[2] Statistics for the very small number of women with husbands in the armed forces in 1940 are not available.

married women with no young children and only 8.8 percent among married women with young children.[15]

The shift toward more young married women and more women with children has already been halted and reversed. Both the marriage rate and the birth rate have passed their wartime peaks and have entered a period of decline which is expected to continue until the war is over. The number of marriageable persons has been reduced to a low point by the many marriages in anticipation of military service and, in addition, millions of marriageable men and husbands are absent in the armed forces. The decline in marriages and births now under way should tend to keep up the rate of labor-market participation among young women, at least until the end of the war in Europe.

### WOMEN OVER 35 YEARS OF AGE

Women between 35 and 65 years of age have been a major source of additional wartime labor, contributing 1.5 million to the total of 6.7 million extra workers in the labor force in April 1944. The rate of labor-market participation for this group exceeded normal expectations by approximately 25 percent (table 6). It is not surprising that the great majority of the extra workers among adult women are over 35 years of age. This group has been little affected by the wartime increase in marriage and birth rates. Moreover, there are large

TABLE 6.—*Estimated Labor-Force-Participation Rates, by Age and Sex, March 1940 and April 1944*

| Age and sex | Labor force as percent of population | | | |
|---|---|---|---|---|
| | March 1940 [1] | April 1944 [2] | | |
| | | Normal | Actual | Percent excess of actual over normal |
| Total, 14 years and over | 52.8 | 53.1 | 59.5 | +12 |
| Males, 14 years and over | 79.7 | 79.3 | 86.4 | +9 |
| 14–19 years | 35.6 | 34.4 | 57.9 | +68 |
| 14–17 years | 19.2 | 17.3 | 40.5 | +134 |
| 18–19 years | 67.6 | 67.3 | 91.5 | +36 |
| 20–24 years | 88.5 | 88.5 | 97.2 | +10 |
| 25–34 years | 95.8 | 95.7 | 97.8 | +2 |
| 35–44 years | 95.4 | 95.0 | 97.2 | +2 |
| 45–54 years | 92.7 | 91.7 | 95.2 | +4 |
| 55–64 years | 84.6 | 83.3 | 89.9 | +8 |
| 65 years and over | 42.2 | 39.6 | 48.5 | +22 |
| Females, 14 years and over | 25.7 | 27.1 | 32.8 | +21 |
| 14–19 years | 19.0 | 17.9 | 33.2 | +86 |
| 14–17 years | 7.6 | 5.9 | 19.8 | +236 |
| 18–19 years | 40.7 | 40.7 | 58.6 | +44 |
| 20–24 years | 45.6 | 46.9 | 53.8 | +15 |
| 25–34 years | 33.3 | 35.0 | 36.1 | (3) |
| 35–44 years | 27.3 | 30.6 | 37.2 | +22 |
| 45–54 years | 22.4 | 24.0 | 31.0 | +29 |
| 55–64 years | 16.6 | 17.3 | 22.0 | +27 |
| 65 years and over | 6.0 | 5.6 | 6.3 | +13 |

[1] Based on data from the 1940 Census adjusted for errors in classification (see Census Release P–44, No. 6) and for 150,000 members of the armed forces not included in the 1940 Census enumeration.

[2] Based on labor-force data described in table 2 (footnote 1) and population estimates from Bureau of the Census.

[3] Excess of less than half of 1 percent.

[15] Bureau of the Census, 16th Population Census, 1940, The Labor Force (Sample Statistics), Employment and Family Characteristics of Women.

numbers of married women over 35 normally outside the labor force and without responsibility for the care of young children. Of some 13.6 million married women aged 35–64 outside the labor force in 1940, 10.2 million or 75 percent did not have any children under 10 years of age. Among married women aged 18-34, on the other hand, there were 9.3 million not in paid work, of whom only 2.9 million or 31 percent were without responsibility for the care of young children.[16]

Very few women remain in the labor force after they have reached the age of 65 and the wartime experience has done little to change this situation. The few women in this age group who have postponed their retirement do not form a significant part of the extra wartime workers.

### MEN 25–54 YEARS OF AGE

Wartime increases in labor-market participation of men aged 25–54 have necessarily been relatively small because there are very few able-bodied men of these ages who are not normally in the labor force. Even though about three-fifths of the men in this age group outside of institutions who were not in the labor force in 1940 had entered the labor market by 1944, the excess over "normal" amounted to only 700,000 or about 2 percent. For the most part these 700,000 are from the "fringes" of the labor market—the men who in pre-war days, sought work only occasionally or intermittently and the men on the borderline between employability and unemployability.

The men in this borderline group are the first to be discharged when business slumps and the last to be hired when business picks up again. For all practical purposes they are unemployable during a period of large labor surplus such as that which preceded the war. Many of these men were out of the labor market in 1940 because they had become convinced they were unable to work or because they were no longer willing to expose themselves to the rebuffs of the labor market after years of unsuccessful search for a job.

The 700,000 extra workers among men aged 25–54 probably include a significant number who, formerly, were occasional or intermittent workers. Since the "labor force" is defined to include only persons working or seeking work during a specific week, there is always a certain number of intermittent workers outside the labor force at any one time. It is "common practice for many migratory casual workers to spend part of the year on the road working or seeking work and then to withdraw from the labor market during the period when the chances of finding work are small." [17] The availability of steady jobs and the pressure of wartime demands for labor have probably reduced significantly the number of occasional workers who may be outside the labor force at any one time.

Another factor, which contributed about 100,000 to the excess over "normal" in the 25–54 age group, is the interruption of pre-war trends toward longer schooling and earlier retirement which had caused a slight downward movement in labor-market participation among men of this age.

[16] Figures quoted include only married women with husbands present.

[17] WPA Research Monograph VII: The Migratory Casual Worker, by John N. Webb. Washington, 1937.

### MEN 55 YEARS OF AGE AND OVER

The interruption of trends toward earlier retirement was more important, however, among men over 55 years of age—particularly in the group over the age of 65. Although the percentage of these older men in the labor market would ordinarily have been expected to decline between 1940 and 1944, there was actually a considerable increase (table 6), so that the rate of labor-market participation exceeded normal expectations by about 22 percent for men aged 65 and over and about 8 percent for men aged 55–64. Altogether the labor force in April 1944 included about 800,000 extra male workers aged 55 and over. For the most part, these are men who have continued working beyond the age when they normally would have retired. In addition, some have reentered the labor force from retirement and others more nearly resemble the persons from the "fringes" of the labor market found in greater numbers among the extra workers under 55 years of age.

# *Employment and Labor Conditions*

## Labor Conditions in British Malaya [1]

### *Summary*

MALAYA derived its world importance from the production of rubber and tin. Production of the two commodities necessitated the recruitment of large numbers of immigrant workers, with the result that in 1939 native Malays formed only 42 percent of the population. Chinese were almost as numerous as the natives and a large number of Indians also had migrated to Malaya. The two immigrant groups formed the major proportion of the wage-earning force, as the native Malays preferred to be small independent farmers and fishermen. The resultant mobility of the labor force prevented large-scale unemployment in depression periods; instead, immigration was reduced and many of the workers returned to their home countries. Wage fluctuations were also minimized by this mobility and by the establishment of standard rates in certain "key" areas by the Indian Immigration Committee, an organization for the protection of Indian workers in Malaya. Daily wages of 35 to 60 Straits Settlements cents—or 20 to 34 United States cents, converted at the pre-war par value of the Straits Settlements dollar—are representative of the pre-war level for unskilled workers on Malayan estates. Organized labor activity was meager in Malaya, the Chinese mutual-aid societies being the only bodies performing any trade-union functions. Increased strike activity just before the war resulted in the passage of industrial-dispute, trade-union, and arbitration legislation in 1940 and 1941. Social-insurance legislation was restricted to workmen's compensation. Japanese occupation of Malaya has brought unemployment and widespread consumer shortages.

### *Economic and Political Background*

British Malaya, before the Japanese occupation, consisted of a narrow peninsula and certain close-lying islands, situated in the Indian Ocean southeast of India, with Thailand on the north and the Island of Sumatra on the south. About the same size as England, the country was made up of three political subdivisions—the four Straits Settlements (Singapore, Penang, Malacca, and Labuan), the four Federated Malay States (Perak, Selangor, Negri Sembilan, and Pahang), and the five Unfederated Malay States (Johore, Kedah, Kelantan, Perlis, and Trengganu). The Straits Settlements formed a crown colony ruled directly by a governor, while the Malay States were self-governed under native sultans with British advisers. State

[1] Prepared in the Bureau's Editorial and Research Division by M. Mead Smith.



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or executive and legislative councils existed in all the subdivisions. The unifying influence of the advisers and the executive control exercised by the Governor of the Straits Settlements resulted in uniformity of policy and legislation in the various subdivisions.

Production of rubber and tin constituted the main pre-war economic activities in Malaya and gave the country its position of importance in international markets. Malaya accounted for nearly half the world production of rubber and approximately a third of the world supply of tin ore. In addition, Singapore and Penang were lively trade centers. In comparison with the two main exports, production of other commodities was extremely small. Some iron ore, manganese, and bauxite was mined by Japanese firms; pineapples were grown and canned; palm and coconut oil and rice were raised; and considerable fishing was done. Industry was practically nonexistent, the great majority of the wage earners being engaged in agriculture. Most of Malaya's small amount of industry was in the Straits Settlements; practically the entire supply of tin came from the Federated States; and the Unfederated States held the largest rice-growing lands. Rubber was cultivated throughout the country.

A substantial group of native Malays were outside the wage system, living at subsistence levels by farming small plots of land or by living on forest animals or vegetation. Three-fifths of the land area was primeval evergreen forest, peopled only by a few jungle tribes. As a result of this relatively one-sided development, Malaya, although possessing a variety of valuable natural resources, was not self-sufficient. The country did not even produce enough rice, the staple food for the great majority of the population; two-thirds of the rice consumed was imported. Dependence on world rubber and tin markets made the country particularly sensitive to fluctuating conditions in the United States.

The Sino-Japanese war affected the peninsula to a certain extent. Malayan Chinese boycotted Japanese goods and struck against Japanese employers, and immigrants often could not return to China. However, conditions were not altered markedly until the European war began in 1939. The Japanese attacked Malaya on December 8, 1941. By January 31, 1942, the British had withdrawn to Singapore, and on February 15, that city fell. For the purposes of this report, "wartime" refers to the period from the beginning of the European conflict to the Japanese occupation of the peninsula.

### *Distribution and Characteristics of the Population*

Of a population estimated in 1939 at 5,396,708 persons, the native Malays [2] numbered only 2,259,333, or 42 percent of the total. The Chinese were almost as numerous as the natives, while Indians [3] were far fewer. Table 1 indicates the distribution of the population, both racially and geographically, at the time of the last census in 1931 and as estimated in more recent years. The number of Europeans in the country was small, and they did not form a part of the wage-earning class, being mostly salaried officials of the Government and on large estates. As such, they are not considered in this report except in the distribution of population.

[2] Population figures group the few immigrants from the Netherlands Indies with the native Malays, since the two groups are racially so closely allied.

[3] Nine-tenths of the Indians in Malaya are Tamils from South India, and in this report the term "Indian" will refer to these persons except where specifically stated otherwise.

TABLE 1.—*Population of British Malaya, by Race and Political Subdivision* [1]

| Administrative subdivision | Total | Native and other Malays | Chinese | Indians | Europeans | Others |
|---|---|---|---|---|---|---|
| Total, British Malaya: | | | | | | |
| 1931 | 4,353,715 | 1,934,900 | 1,705,915 | 623,224 | 17,648 | 72,028 |
| 1939 | 5,896,708 | 2,259,333 | 2,332,058 | 744,283 | 30,081 | 30,953 |
| Straits Settlements: | | | | | | |
| 1931 | 1,114,015 | 285,316 | 663,518 | 132,277 | 10,003 | [2] 22,901 |
| 1941 | 1,435,895 | 315,629 | 927,003 | 148,851 | 18,101 | [2] 26,311 |
| Federated Malay States: | | | | | | |
| 1931 | 1,713,096 | 593,731 | 711,540 | 379,996 | 6,350 | 21,479 |
| 1941 | 2,212,052 | 722,626 | 989,635 | 466,056 | 11,149 | [2] 22,586 |
| Unfederated Malay States: 1931 | 1,526,604 | 1,055,851 | 330,857 | 110,951 | 1,295 | 27,648 |
| Johore: | | | | | | |
| 1931 | 505,311 | 234,422 | 215,076 | 51,038 | 722 | [2] 4,033 |
| 1940 | 737,590 | 309,520 | 346,590 | 76,230 | (3) | 5,250 |
| Kedah: | | | | | | |
| 1931 | 429,691 | 286,292 | 73,415 | 50,824 | 411 | 13,779 |
| 1940 | 515,758 | 334,054 | 106,049 | 60,850 | 783 | 14,022 |
| Kelantan: | | | | | | |
| 1931 | 362,517 | 330,774 | 17,612 | 6,752 | 124 | 7,255 |
| 1940 | 390,332 | 338,922 | 30,913 | 11,513 | 175 | 8,809 |
| Perlis: | | | | | | |
| 1931 | 49,296 | 39,831 | 6,500 | 966 | 3 | 1,996 |
| 1940 | 57,776 | 46,133 | 8,432 | 1,178 | (3) | 2,033 |
| Trengganu: | | | | | | |
| 1931 | 179,789 | 164,564 | 13,254 | 1,371 | 35 | [2] 565 |
| 1941 | 211,041 | (4) | (4) | (4) | (4) | (4) |

[1] Figures for 1931 are census data; other figures are annual mid-year official estimates.
[2] Includes Eurasians.
[3] Europeans are included in the class "other"; last available estimate for Europeans in Johore was 930 in 1937, in Perlis, 7 in 1937.
[4] Figures not available. There was little change in the population from migration.

The Malays predominated in the Unfederated States, but occupied a much smaller proportion of the more highly developed sections. The two major immigrant groups inhabited the more advanced areas of the Straits Settlements, the Federation, and, to a certain extent, Johore. The principal centers of population in 1931 were Singapore and Penang in the Straits Settlements, with estimated populations of 490,489 and 149,408, respectively, and Kuala Lumpur and Ipoh in the Federated Malay States, with populations of 111,738 and 58,863. Chinese outnumbered all other races combined in such urban centers, forming three-fourths of the population in Singapore.

Native to the peninsula were the Malays, divided into distinct tribes with little or no national feeling. The Malay varied from fierce savagery in the uncivilized tribes of the interior, many of whom lived on jungle products, to a high degree of culture among the coastal tribes. Much of the civilization of the latter groups was the result of foreign influences, especially Hindu and Arab. Until recently the immigrant population was made up predominantly of men, who worked for 2 or 3 years and returned home as soon as they had a supply of ready cash. Later, more women came, and increasing numbers of immigrants settled in Malaya. While in Malaya, the immigrants—chiefly the Chinese—remained politically and culturally unassimilated. The Chinese were the first to exploit tin and contributed largely to the development of the country.

Malay was the language most prevalent on the peninsula, being widely used as the language of commerce and more or less understood, in numerous dialects, by all residents of Malaya. Free education was provided in the vernacular for all Malays, and financial aid was given to the vernacular Chinese and Indian schools. However, the per-

centage of literacy was low, owing to the large proportion of migrant laborers who received no education in their home countries. The Mohammedan, Hindu, Buddhist, and Christian religions all had numerous adherents in Malaya.

### *Immigration*

Large-scale, organized immigration came with the development of Malaya's rubber and tin industries and the accompanying need for labor. Immigration was of overwhelming importance in Malayan life. Most economic activity was dependent on the continuous flow of immigrants, mainly from China and India, but also, in small numbers, from the Netherlands Indies.

Before the Japanese occupation, conditions of Indian immigrants were protected by the Indian Immigration Fund, under management of a committee which assessed planters on the basis of the work done by Indian laborers in their employ, and which paid for transportation costs, feeding, etc., of Indian workers en route to Malaya. In some cases free repatriation was provided. Usually only unfit immigrants received assistance to return to their homelands, but, during periods of depression, unemployed Indians also were deported at the expense of the Fund. The Fund was established in 1907 and was pan-Malayan in operation.

Workers also came to Malaya at their own expense. The proportion of unassisted immigrant laborers increased markedly in the middle 1930's, apparently in part because the workers wished to avoid the Fund formalities and in part as a result of the severe restrictions imposed on assisted migration in the depression years. Of the assisted group of immigrants, the proportion of laborers coming voluntarily and not recruited also increased in recent years. Recruiting became almost nonexistent as a means of obtaining labor from India, though it was still essential for new estates which had not yet built up a connection with villages in India, or for laborers who lived too far from the recruiting stations to pay their own railway fares. Reasons for the increasing proportions of nonrecruited immigrants, both assisted and unassisted, were the reputation for good employment conditions on Malayan plantations and the free-labor policy pursued. The indenture system was abolished for Indians in 1910, for Chinese in 1914, and for the Netherlands Indies immigrants [4] in 1932.

No public fund was provided to assist laborers other than the Indians to migrate either to or from Malaya. With the labor shortage immediately preceding the present war, attempts were made to increase the number of Javanese immigrants from the Netherlands Indies. On September 25, 1941, a bill was introduced to extend the working of the Indian Immigration Fund to include them. Apparently the bill was not passed before the peninsula was invaded by the Japanese.

### *Occupational Distribution of the Population*

Approximately 46 percent of the total population—1,986,905 persons—of Malaya were gainfully occupied at the time of the 1931 census. Women comprised about one-fourth of the force. Table 2 shows the occupational distribution in Malaya by administrative subdivision in 1931.

[4] The system was in disuse a number of years before it was legally abolished.

TABLE 2.—*Occupational Distribution of Gainful Population in British Malaya, 1931*

| Administrative subdivision | Total | | Gainful workers in — | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Number | Percent of total population | Agriculture | Fishing | Mining and manufacture | Transport and commerce | Public service and professions | Personal service |
| Total, British Malaya | 1,986,905 | 45.6 | 1,170,880 | 41,440 | 242,924 | 336,455 | 62,440 | 132,766 |
| Straits Settlements | [1] 470,446 | 42.2 | 134,107 | 16,030 | [2] 69,362 | 169,811 | 29,605 | 51,531 |
| Federated Malay States | 837,811 | 48.9 | 520,494 | ---------- | 136,067 | 109,210 | 19,136 | 52,304 |
| Unfederated Malay States | 678,648 | 44.5 | 516,279 | 25,410 | 37,495 | 57,434 | 13,099 | 28,931 |
| Johore | 223,338 | 44.2 | 163,403 | 5,136 | 13,183 | 22,365 | 5,806 | 13,445 |
| Kedah | 194,780 | 45.3 | 158,925 | 2,758 | 7,345 | 15,035 | 3,585 | 7,138 |
| Kelantan | 158,510 | 43.7 | 128,263 | 6,627 | 5,566 | 11,123 | 2,059 | 4,872 |
| Perlis | 25,203 | 51.1 | 20,837 | 482 | 1,442 | 1,174 | 326 | 942 |
| Trengganu | 76,811 | 42.7 | 44,851 | 10,407 | 9,959 | 7,737 | 1,323 | 2,534 |

[1] Information is not available to indicate whether any of the 643,569 persons remaining in the total population were gainfully occupied in pursuits not here listed.
[2] Census classification was "industrial employment"; practically no mining was carried on in the Straits Settlements.

Agriculture accounted for by far the majority of workers—1,170,880. It was carried on both by the plantation method of large estates, owned chiefly by European companies, and by the less-organized system of many small holdings, owned by Asiatics. Compared to agriculture, transport and commerce which employed the next largest number of workers occupied but a small force—336,455. Employment in mining, which was so important in the nation's economy, was even more limited, and industry accounted for only a few workers. Malaya's small amount of industry consisted of tin smelting, the only large-scale industry in the country, and a number of small Singapore establishments manufacturing rubber products or engaged in engineering, shipbuilding, and processing of various kinds.

In general, the Chinese worked the tin mines and did the trading, and the Indians were employed on rubber estates, although small numbers of the two races, especially the Chinese, were engaged in other occupations. The two immigrant groups were the main constituents of the labor force. Most native Malays did not work as wage earners, preferring to be small farmers and fishermen, and were thus a negligible element except, to a certain extent, in the Unfederated States, where alien competition was at a minimum.

What industrial skill existed in Malaya was concentrated in the Straits Settlements, and was mostly Chinese. In the Malay States, various "cottage" industries and handicrafts were carried on, such as mat making, embroidery, basketry, pottery, metalwork, and weaving and dyeing.

## *Employment Conditions*

Malaya was deeply affected in 1930 by the world depression which started in 1929. Because of the nature of the labor force, lowered rubber and tin prices resulted not in large-scale unemployment but in reduced immigration. Only in the two big cities of Singapore and Penang did unemployment become general. Immigration was decreased by lowered wages, uncertainty of employment, cuts in Government assistance to Indian migrants, and application of quotas

to adult male Chinese.[5] In addition, many workers returned home from Malaya, some at their own cost and others at the expense of the Immigration Fund or Malayan Government. The result was a net outflow of both Indians and Chinese. Efforts were made to minimize dismissals on rubber estates by part-time employment, lower wages, fewer working days in the week, and reduced employment of women and children. Increased use was made of established relief facilities, not ordinarily utilized extensively. For workers in need of relief, the Indian Immigration Fund maintained a home in Kuala Lumpur—the Home for Decrepit Indians—which combined the functions of an asylum for the unemployed, a convalescent home, and an orphanage. Depots were also provided in Singapore, Penang, and elsewhere, and unemployed Indian laborers were housed and fed until work was found for them. The transportation of unemployed to places where work was available was financed by the Fund. The Chinese Protectorate maintained suitable institutions for Chinese laborers.

After improving in 1933, conditions advanced steadily as a result of the rise in rubber and tin prices following international regulation. The demand for labor rose, and unemployment disappeared. Restrictions on assistance to Indian migrants were removed, Chinese quotas were raised, and immigration recommenced.

The year 1938 brought a recession in response to the unexpected depression in the United States. Widespread unemployment and reduced immigration resulted. The spread of the Sino-Japanese war to southern China accentuated the unemployment of Chinese workers by preventing their return to China. Continued voluntary Indian immigration augmented Indian unemployment. The Government provided relief work (mostly on the construction of earth roads), reduced the Chinese quota, and cut Indian assistance. However, the situation continued to deteriorate, and, in June 1938, the Government of India prohibited emigration to Malaya. The trend of employment for a restricted group of estate, mine, and factory workers in Malaya during the period 1930–38 is shown below.

| | Number employed | | Number employed | | Number employed |
|---|---|---|---|---|---|
| 1930 | 362, 599 | 1933 | 291, 924 | 1936 | 386, 317 |
| 1931 | 310, 360 | 1934 | 362, 037 | 1937 | 479, 536 |
| 1932 | 270, 439 | 1935 | 348, 979 | 1938 | 398, 067 |

At the end of 1939, the European war stimulated Malayan activity, and the demand for rubber and tin soared. A labor shortage resulted. With the refusal of the Indian Government to remove its emigration ban and the rejection by the Malayan Government of employers' requests for increased Chinese quotas, attempts were made to increase recruitment from Java. The labor situation did not change, however, up to the time of the Japanese occupation early in 1942. All workers offered by the labor market continued to be absorbed and considerable shifting of laborers from one job to another took place. Under the British Defense Regulations, extended to the colonies in 1939 and 1940, labor and industry could have been requisitioned, but no such action was taken.

[5] A quota was put on the admission of Chinese women in 1938. Children under 12 years of age remained unrestricted.

## *Labor Administration*

The Labor Department, headed by the Controller of Labor, had jurisdiction over workers of all classes and races on estates and other places of employment in the whole of Malaya. Local labor offices in the various sections reported to the Controller, who coordinated labor action throughout the country. Indians were specially protected by the Indian Immigration Committee—which also supervised Javanese and Malay workers—and by agents maintained in Malaya by the Government of India. Chinese workers were under the jurisdiction of the Chinese Protectorate; several of the Protectorate's officers were deputy and assistant controllers of labor, and acted as liaison officers.

## *Wages and Hours*

### GENERAL TREND OF WAGES AND COST OF LIVING

Wage fluctuations in Malaya were minimized by the mobility of the immigrant labor supply, although some rises and falls occurred inevitably with prosperity and depression. Such wage changes as took place followed the trend of employment conditions, a reduction occurring in 1930, followed by recovery, and by another fall in 1938. The European war in 1939 caused a rise which continued throughout 1940 and 1941 and finally reached the high 1929 levels.

No official indexes of wage earners' cost of living were compiled in Malaya. A typical Indian laborer's monthly "budget" was computed, but no index numbers were published and only scattered information is available. Cost of living fell in 1930 and 1931, remained fairly constant in 1932, and fell again in 1933, by 9.7 percent. The budget remained practically unchanged in 1934 and increased slightly —2.5 percent—in 1935. Little change took place during 1936, but by the end of the following year the budget had risen 4 percent. With the outbreak of the European war in 1939, cost of living started upward and continued to rise throughout 1940. By the end of the latter year, the standard Indian budget had risen 24 percent from the beginning of the war—9.3 percent of the rise being in 1940. Cost of living continued to rise during 1941.

The lack of cost-of-living and wage indexes prevents computation of exact real wages. However, the general correspondence of the direction of living costs with the trend of wages indicates that wage fluctuations usually did not alter the worker's position as much as the change in money wages would indicate.

Malayan wages varied both between races and sections of the country, and also according to the type of occupation. Daily wages of 35 to 60 Straits Settlements cents—or 20 to 34 United States cents (converted at the pre-war par value of the Straits Settlements dollar, which equaled 56.9 United States cents in 1938 [6])—are representative of the pre-war level for unskilled workers on Malayan estates. Laborers on rubber estates and tin mines and most of those working for the Government were housed rent-free and received free medical attention; estate workers were provided with allotments of land to work for themselves. Nine days' annual vacation with pay was approved in 1939 for all Government employees paid by the day.

[6] In the following data, figures given in dollars and cents refer to Straits Settlements currency.

*Agriculture.*—Agricultural workers were usually Indians. A small group of Indians on oil-palm and tea estates worked on a piece-work basis, but the majority were day laborers. Wages were higher on plantations than on small holdings. Wage differentiation for women was small and in some instances tended to disappear. Table 3 shows daily earnings of unskilled Indian laborers on rubber and coconut estates, by geographic area, in 1934, 1936, and 1937. Estate factory workers received higher pay than other estate workers. In the ranges given, the lower rates are for morning work (6–6½ hours); the higher figures are for full-time work.

TABLE 3.—*Daily Earnings of Unskilled Indian Laborers on Estates in British Malaya, 1934, 1936, and 1937*

| Area and pursuit | 1934 | | 1936 | | 1937 | |
|---|---|---|---|---|---|---|
| | Males | Females | Males | Females | Males | Females |
| *Rubber estates* | | | | | | |
| Store and factory workers: | | | | | | |
| Straits Settlements: | *Cents* | *Cents* | *Cents* | *Cents* | *Cents* | *Cents* |
| Singapore | 35–55 | ..... | 40–50 | 32–40 | 45–57 | 35–3 |
| Penang | 40 | ..... | 40–45 | ..... | 45–59 | ..... |
| Province Wellesley | 35–45 | 28–40 | 40–45 | 30–32 | 50–60 | 4 |
| Malacca | 40–50 | 30–35 | 40–50 | 32–40 | 50 | 4 |
| Federated Malay States: | | | | | | |
| Perak | 40–45 | 32 | 45–50 | 32–36 | 55–60 | 40–4 |
| Selangor | 40–50 | 30–35 | 40–50 | 32 | 55–60 | 40–4 |
| Negri Sembilan | 42 | 32 | 45–55 | 35–45 | 55 | 4 |
| Pahang | 47–65 | ..... | 47–60 | 40 | 45–75 | ..... |
| Unfederated Malay States:[1] | | | | | | |
| Johore | 50–60 | 35–45 | 40–60 | 32–45 | 40–60 | 32–4 |
| Kedah | 35–50 | 30–45 | 45–50 | 40–45 | 50–75 | 40–5 |
| Kelantan | ..... | ..... | ..... | ..... | ..... | ..... |
| Tappers: | | | | | | |
| Straits Settlements: | | | | | | |
| Singapore | 30–55 | 28–35 | 35–48 | 32–40 | 40–55 | 3 |
| Penang | 35–45 | 28–40 | 40 | 32 | 45–50 | 3 |
| Province Wellesley | 35–45 | 28–40 | 40 | 32 | 50 | 4 |
| Malacca | 35–50 | 30–40 | 35–40 | 28–32 | 50 | 4 |
| Federated Malay States: | | | | | | |
| Perak | 35–40 | 28–35 | 40 | 32 | 50 | 4 |
| Selangor | 35–40 | 28–32 | 40 | 32 | 50 | 4 |
| Negri Sembilan | 30–40 | 28–32 | 40–45 | 32–45 | 50 | 4 |
| Pahang | 40–64 | 35–54 | 40–50 | 33–44 | 50–60 | 36–4 |
| Unfederated Malay States:[1] | | | | | | |
| Johore | 40–55 | 32–45 | 40–45 | 32–45 | 40–50 | 32–4 |
| Kedah | 35–40 | 28–35 | 40–45 | 32–45 | 50–55 | 40–4 |
| Kelantan | 40 | 32 | 47 | 37 | 50 | 4 |
| Field workers: | | | | | | |
| Straits Settlements: | | | | | | |
| Singapore | 30–55 | 28–35 | 40 | 32 | 40–50 | 35–4 |
| Penang | 35–45 | 28–40 | 35–40 | 30–32 | 45–50 | 4 |
| Province Wellesley | 35–48 | 28–40 | 40 | 32 | 50 | 4 |
| Malacca | 35–50 | 30–40 | 35–40 | 28–32 | 50 | 4 |
| Federated Malay States: | | | | | | |
| Perak | 35–40 | 28–32 | 40 | 32 | 50 | 4 |
| Selangor | 28–40 | 28–32 | 40 | 32 | 50 | 4 |
| Negri Sembilan | 30–40 | 28–32 | 40 | 32 | 50 | 4 |
| Pahang | 42–55 | 32–40 | 40–60 | 32–40 | 50–60 | 32–4 |
| Unfederated Malay States:[1] | | | | | | |
| Johore | 40–45 | 32–40 | 40 | 32 | 40–50 | 32–4 |
| Kedah | 30–40 | 28–35 | 40 | 32 | 50 | 4 |
| Kelantan | 40 | 32 | 40 | 32 | ..... | ..... |
| *Coconut estates* | | | | | | |
| Store and factory workers: | | | | | | |
| Straits Settlements | 35–45 | 30 | 40–45 | 32–34 | 50–55 | 40–4 |
| Federated Malay States | 40–45 | 25–32 | 45–50 | 24–36 | 50–60 | 40–4 |
| Pickers: | | | | | | |
| Straits Settlements | 35–40 | 30–32 | 40–48 | 32 | 45–50 | 4 |
| Federated Malay States | 38–45 | 30 | 40–60 | 32 | 40–60 | 4 |
| Weeders: | | | | | | |
| Straits Settlements | 35–40 | 28–32 | 40 | 32 | 45–55 | 4 |
| Federated Malay States | 38–40 | 30–32 | 40 | 32 | 50 | 4 |

[1] No material is available for Perlis and Trengganu; rubber was unimportant in those areas.

Wages in October 1939 were approximately 50 and 40 cents for men and women, respectively. In 1940, the announced rates were unchanged, but the usual adjustments in favor of labor during a full-employment period took place. A 12-percent increase was common. Average monthly earnings increased steadily—for minors as well as for men and women—and by the end of the first year and a half of war, wages had advanced more than 33 percent. In early 1941, wages had risen to 60 cents a day for men and 50 cents for women, and were the highest ever paid in the history of Malaya's rubber industry. Chinese coolies at the airdrome received a minimum of $1 a day.

Javanese and Malay wage earners received much the same wages as the Indians. Chinese usually worked on a piece-work basis, and their earnings were higher, averaging 20 percent more in 1938. In contrast to the Indians, who were usually employed directly, most Chinese were employed under the contracting system, a grievance of long standing in Malaya. Employers hired labor through labor contractors who regularly received a cut from the workers' wages as commission. This reduced actual earnings substantially for the Chinese. In recent years, a higher proportion of Chinese were employed directly, but the contracting system was still fairly prevalent.

*Tin mining.*—Wages in the tin-mining industry were higher than those on estates, but were subject to greater fluctuation with good and bad times. The Chinese who worked the mines were willing to take heavy pay reductions when prices were poor—sometimes accepting as much as an 80-percent cut; however, they expected to share in any improvement. Miners fared worse than estate workers when wages dropped, as they did not have land for subsistence farming. The contracting system was in use here too and contractors' commissions constituted a substantial proportion of mining wages, ranging from one-tenth to one-fourth of the coolie's earnings.

Payment by piece and payment by the day were the two main wage systems in the industry. Most laborers worked under the former scheme—80 percent of the Chinese in Federated States mines in 1936 being paid by piece. No basic rates are available; contractors who provided a gang of workers received from $5 to $7 in 1935–36 for each cubic yard of ground cut and carried away, but no statement was made with regard to how much of this each worker was paid. Daily wages during this same period were from 40 to 60 cents, with workers housed and fed free at an additional cost of about 20 cents a day.

In addition to these two systems, some workers were employed on a profit-sharing basis, earning good wages in prosperity and a mere subsistence in depression. In the latter periods, owners often handed the working of the deposits over to the labor force; the workers succeeded in getting only cost of food and bare necessaries from the mine. Under the "tribute" system, a mining speculator made the initial outlay, provided food and shelter for laborers, and permitted them to share whatever was left from the profits of the mine after he had taken his tribute.

*Other nonagricultural workers.*—Wages of industrial labor were considerably higher than those on the estates. In 1938, they were from 80 cents to $1.20 per day for men, with a wider range in certain industries and remote areas (up to $3 daily in Kedah). Scattered information indicates that earnings in pineapple factories were from

50 to 70 cents per day. They were approximately the same in sago factories. In establishments manufacturing rubber articles, wages depended on the ability of the worker. In one such factory (the Bata factory), the average rate of pay was $1.36 per day and the lowest was 68 cents; a few part-time piece workers received about 37 cents per day. Daily wages in similar factories, Chinese-owned and with Chinese workers, averaged 70 cents. In various engineering establishments and small foundries, the Chinese, who formed the greater part of the labor force, averaged $45 monthly. Some Indians were employed on tasks requiring less skill; their monthly earnings averaged $30.

Prevailing daily wage rates for construction workers in June 1940 were as shown below. Unskilled coolies are included for purposes of comparison.

| | *Daily wage* |
|---|---|
| Coolies: | |
| Chinese | $0. 80–$0. 90 |
| Lascar | . 65– . 80 |
| Indian | . 60 |
| Carpenters and masons | 1. 40– 1. 50 |
| Fitters | 1. 80– 2. 20 |
| Boilermakers | 2. 00 |
| Drillers | 2. 00 |
| Indian drivers (mixer, pump, and crane) | 1. 10– 1. 75 |

Government departments maintained about the same wage rates as those set for the estate workers. Daily wages paid to male Government employees of the laboring class throughout the Straits Settlements in 1936 ranged from 40 cents to $1.44, depending on the locality and the type of work. In November 1939, after the European war had broken out, the Governments of the Straits Settlements, Federated Malay States, Johore, and Kedah, and quasi-governmental bodies, such as the harbor boards and municipalities and the departments of the Imperial Government, introduced a cost-of-living allowance for their own laborers and artisans. The allowance varied with the changes in retail prices and was based on the fluctuations of a standardized budget. Rates provided were as follows.

| | *Monthly allowance* | |
|---|---|---|
| Daily wage: | *November 1939* | *June 1940* |
| $1.00 or less | $1. 00 | $2. 80 |
| $1.01 to $1.50 | 1. 50 | 3. 20 |
| $1.51 to $2.00 | 1. 50 | 3. 65 |
| $2.01 and over | 2. 00 | 4. 10 |

Conditions were particularly bad for Singapore's 10,000 clerks. Unorganized, inarticulate, and generally apathetic, their numbers far exceeded any possible demand for them, and the schools continued to turn out 700 boys a year who were qualified for clerical positions. After the depression, they drew salaries of $10 a month upwards—barely a living wage. They did not even have the protection afforded to manual workers by the Labor Department, and aged employees regularly were dismissed to be replaced by younger men at lower salaries.

In Singapore's Chinese shops, working conditions were also extremely poor. In 1938, the wage scale ranged from $8 to $25 a month and was lowest for those working the longest hours.

Rates of pay in 1937 for domestic servants throughout the peninsula were generally from $20 to $30 a month.

Wage increases of from 10 to 12 percent were granted during the early part of the war (end of 1939 and beginning of 1940) by many European and Chinese trading firms as well as by Chinese enterprises in Singapore and up-country.

Standard (or minimum) wages were established for Indian estate workers by the Indian Immigration Committee under the 1923 Labor Code. The rates were set only for certain "key" areas, but in effect they influenced wages in other districts as well. They also tended to set the minimum for those of other races who were in the same work, as well as the minimum rates in other industries. Standard rates were 50 cents a day for men and 40 cents for women in 1929; 40 and 32 cents, respectively, during the 1930's and 1940; and, just before the Japanese occupation, 50 and 40 cents again. Slightly higher standard rates were prescribed in remote key areas.

In 1932, to insure a minimum living to all workers and to keep conditions level in key and non-key areas, the Indian Immigration Committee fixed monthly subsistence wages for estate workers. Employers in non-key areas had been reducing wages directly, and key-area employers, who formerly had paid full standard rates for less than the normal length day, had begun to pay wages only for the hours actually worked. The monthly subsistence levels set were $7.20 for men and $6 for women. Most European estates endeavored to maintain these wages, but smaller estates and native holdings often could not do so.

Chinese workers had no organization comparable to the Indian Immigration Committee for protecting their wages. While Chinese day laborers on estates received wages equal to those set for the Indians, Chinese who worked on piece rates were not affected by the standards set. In 1937, an Advisory Committee on Chinese Labor was created, with wage-fixing functions similar to those of the Indian Immigration Committee but without statutory powers. Information on its activities is not available.

The Labor Code provided for a 9-hour day and a 6-day week for all laborers, with overtime to be paid for at double time. The average number of hours worked by estate laborers and paid for at standard daily rates was normally much less; in one of the Unfederated States in 1937, estate factory workers averaged 8 to 9 hours, weeders 7 to 8, and tappers 6 to 6½. During depression periods, estate owners usually extended the number of hours but continued to pay only the standard daily wage.

In mines where workers were mainly employed by the day, an 8-hour workday was usual in the mid-1930's, as was the case in Government departments. It is probable that hours were considerably longer in mines under different wage systems and in most industries where the labor force was composed mainly of Chinese, who were willing to work long hours. Chinese clerks and shop assistants in Singapore often worked up to 17 hours per day.

As provided in the Labor Code, no person was bound to work on more than 6 days in the week, but no specific weekly day of rest was provided. Though mines, estates, and factories—except Government establishments—usually worked 7 days a week, the worker often did not average more than 5 days' work, if account was taken of the numerous religious feasts and holidays.

### *Conditions of Women and Children*

In the early 1930's, an amendment to the Labor Code prohibited night work between 10 p. m. and 5 a. m. for women of any age and for young persons under 18 years. Maternity allowances and leave before and after confinement were also provided for under the Labor Code, and the maintenance of schools and nurseries was required on estates of a certain size. Various legislation prohibited employment of children under 14 years of age on ships, of children under 16 years of age in places using power-driven machinery, of children under 12 years outside the estates, and of Indian immigrant children under 10 years anywhere. Child labor was employed extensively on rubber estates, and the sums earned by the children made an appreciable yearly contribution to the coolies' incomes.

The mui-tsai system formerly was prevalent in Malaya, whereby girls of poor families were bound over as domestic servants to persons better able than their parents to provide for them. The abuse of the system brought legislation to regulate and finally to abolish the practice. A 1932 ordinance required all mui tsai to register, and prohibited future employment as mui tsai of women not so classed at the time of the registration.

### *Labor and Employer Organizations and Industrial Relations*

In peacetime, no special legislative provisions were made for trade-unions. The basic right of association was established for all groups by the societies legislation of 1909. The powers of the Registrar of Societies were used very sparingly, and official policy was designed to foster organization. Chinese mutual-aid societies were not formal trade-unions, but they performed a number of trade-union functions, such as presenting demands for wage increases and initiating strikes. Apparently in part because of the higher standards of Malaya in comparison with India, no Indian organizations had progressed far enough to be considered labor organizations. The Central Indian Association of Malaya (C. I. A. M.) worked to improve conditions of Indian laborers, but the organization had broader aims, basically political.

Employers showed a disinclination to organize. The only exception appears to have been the United Planters' Association of Malaya, an extremely powerful organization. The monthly subsistence wages established by the Government during the depression were maintained only with the support of the Association.

Prior to 1936, strikes were only sporadic, with no antistrike legislation enacted. Government intervention was confined to cases of unlawful assembly and criminal intimidation that were subject to prosecution under the Penal Code; such provisions were inadequate for controlling trade disputes. In cases in which the demands of striking workers were not granted, or in which no settlement was reached, the Labor Department investigated and negotiated an agreement. If the strike was unjustified, the workers were paid off and dismissed; if workers had been hired in the strikers' places, the Labor Department often housed the unemployed workers and found them work.

Organized labor activity began to increase in the immediate pre-war period. Encouraged by the Communist Party, a large growth in the number of Chinese registered societies took place. In 1936, a strike

movement began which, after dying down slightly in 1937, continued to grow until the invasion. Most of the strike activity was carried on by the Chinese, with Indian strikes confined, until recently, to scattered local disturbances. A large proportion of the activity occurred in Singapore. The number of workers participating in stoppages varied from 25 in one case to 17,000 in another, with strikes of about 100 being most common. Usually the strikes lasted only a few days, but the range was from 2 hours to 3 months.

At first, strikes were largely for the purpose of increasing wages. Shorter hours and improved working conditions were requested in a few instances. In addition, many small local problems brought on disturbances. Thus, 70 laborers stopped work on one estate because of a rumor that certain members of the estate staff were practicing witchcraft. With the outbreak of the European war in 1939, strikes grew in number even more rapidly and resulted not only from demands for increased wages but also from the sharply rising cost of living, the workers' desire for a share in the profits being made, and political reasons. The Communist Party was closely involved with the Chinese patriotic movement which gained impetus from Japanese aggression against China. The China Relief Fund was expanded into a political power with broad influence on labor. The fact that political agitators instigated the strikes, rather than labor leaders, resulted in a disorganized movement.

The rapidly increasing number of strikes resulted, in 1940 and 1941, in the outlawing of strikes in certain essential pursuits. In addition, an industrial-disputes bill was introduced late in 1941 and passed in the Straits Settlements. The legislation was designed to restrict strikes and lockouts to legitimate purposes such as wages and hours.

The strike movement further resulted, in 1940, in the passage of trade-union legislation. The measure required the registration of unions separately from other organizations[1] and made them liable for contracts entered into by them or by their agents. Immunity from civil suits for acts performed in connection with labor disputes was granted to registered trade-unions and they could not be prosecuted on the ground of "restraint of trade." The right of collective bargaining, previously nonexistent in Malaya, was emphasized. Government employees could not be members of trade-unions.

Also enacted during 1940 was the industrial-courts legislation, providing for the establishment of the first official machinery for settling industrial disputes. Previously, the Singapore Traction Co. strike had been submitted to arbitration in July 1938. The award of the Government-appointed tribunal in November gave the men little more than the company had offered them before the strike began. However, both parties accepted the award and an important precedent was set. The 1940 legislation provided for the appointment by the Governor of a standing industrial court. Both employers and workers were to be represented, though the proportions were not specified. The Controller of Labor could refer cases for settlement to the industrial court, to arbitration by one or more persons appointed by him, or to a board of arbitration with equal representation of both sides and chosen from a panel constituted by the Governor. Provision was also made for the appointment of courts of inquiry to investigate disputes.

[1] By the beginning of March 1942, no union had yet been registered.

Compulsory arbitration of labor disputes in certain occupations during the war was provided for in July 1940 under Great Britain's Defense Regulations. When voluntary negotiation failed, differences were to be referred under the Regulations to a tribunal appointed by the Governor, and both parties were to be required to accept the award.

### *Cooperative Movement*

The Malayan cooperative movement began in 1922, when the first urban credit association was started, and was largely the result of Government action to improve the condition of the people by the cultivation of habits of thrift and by providing a source of credit at moderate rates. The Government maintained an office to advise and guide all types of cooperatives. No funds were advanced, but various privileges were granted, such as exemption from the payment of certain stamp fees. In 1933, the Straits Settlements Government further encouraged credit associations by announcing that thereafter no civil servant would be allowed to sign a promissory note except to the Government or to a cooperative association.

Credit associations were by far the predominant type, forming 88 percent of the total number of associations in 1938, with 92 percent of the total membership. Other associations were those of the Indians, chiefly for thrift, and the so-called "better-living" associations, formed for the purpose of inducing members to forego the expensive ceremonies customary at weddings, funerals, etc.

From 1928 to 1938, the number of associations of all types rose from 144 to 579. Total membership increased nearly fivefold from 21,930 to 103,102, but average capital per member declined from $99 to $88.

Apparently the cooperatives were not greatly affected by the war. Exact information is not available.

### *Social Insurance*

Workmen's compensation legislation[1] came into effect in Malaya in the early 1930's. Coverage extended to workers or dependents of workers employed in certain occupations who earned not more than $200 per month and suffered injuries resulting in death or any disablement for a period exceeding 7 days, or who contracted specified occupational diseases. Employers were liable for payment of the benefit.

Death benefit for an adult was a sum equal to 30 months' wages or $1,600; for a minor the sum was $200. If an adult sustained permanent total disablement, the compensation was a sum equal to 42 months' wages or $2,400; in case of a minor, it was 84 months' wages or $2,400. Compensation for permanent partial disability was a fixed percentage of that for permanent total disability, depending on the nature of the injury. Injuries for which compensation might be obtained ranged from loss of an arm above or at the elbow, which counted as 70-percent reduction in earning capacity, to loss of any finger other than the index finger, reckoned as a 5-percent decrease. Temporary disablement was compensated for a period of not more than 5 years. Semimonthly benefits for an adult were $10 or a sum equal to one-fourth of the monthly wage; minors received a sum equal to one-third of the monthly wage (one-half, after the person became an adult), not to exceed $10.

No other system of social insurance was in effect in Malaya.

## *Conditions Under the Japanese*

### ADMINISTRATION

Japan transferred all of the Unfederated States except Johore to Thailand's rule, and the Island of Sumatra was added to "Japanese" Malaya. The country was put under a strict military administration which controls economic as well as political activities, including those of the Japanese. A director-general, responsible only to the War Office in Tokyo, heads the military administration, assisted by a number of advisers and by a central council of high Government officials and representatives of the main communities. Beneath this central organization, which includes about 15 administrative bureaus, are corresponding governmental bodies for each State, with governors comparable to the director-general. Important administrative positions are filled by the Japanese, with local governments still in the hands of the natives, who are being trained, however, in Japanese methods.

The Japanese have attempted to transform Malaya into a completely planned economy. All business and industry are conducted by a permit system. Control of economic activities, both large and small, has passed into Japanese hands. Aims of the administration are to provide certain materials necessary to Japan and to establish local self-sufficiency. Accordingly, iron-ore and bauxite production and shipbuilding are encouraged, for the benefit of the Japanese war machine, and special efforts are made to increase production of rice and cotton and to establish factories for making domestic substitutes for imported goods.

### LABOR CONDITIONS

Unemployment began almost immediately after the invasion. Loss of markets and upset production were particularly bad in the rubber and tin industries, and plantation and mine workers—that is, principally the Chinese and Indians—have suffered most from disruption of the economy. The Malays, on the farms and in their villages, have not been greatly affected.

In March 1943, the Japanese said that the unemployment problem had been solved by the air-base work. Almost immediately thereafter, in an effort to cope with unemployment, the administration established a Labor Affairs Office in Singapore for the placement of workers. Operation was begun April 1, 1943. By the end of July of that year, the Japanese stated that the office had provided thousands of jobs.

A labor-service corps was formed throughout Malaya during 1943, to facilitate a speedy supply of labor for construction. Twenty persons aged from 15 to 45 years were taken from each 250 inhabitants.[8] Members were to be paid for their work and given identification badges.

[8] On the basis of the territory comprising British Malaya, exclusive of the four States given to Thailand, it is estimated that about 280,000 were made members of the corps.

At the same time that unemployment existed in certain areas and occupations, a degree of labor requisitioning was authorized. In December 1943 it was announced that a conscription system for handling Malayan manpower had been completed and the drafting of local inhabitants to do agricultural service would be extensive. Laborers in nonessential work were to be replaced with girl workers. The first step in the threatened draft was taken in Singapore on January 1, 1944, when an attempt was made to register all workers for compulsory labor service. About 150,000 persons in industry, commerce, and agriculture were registered. An investigation of the movement of workers and an appropriate disposition of labor were to be carried out. The Japanese broadcast regarding the registration did not indicate the sex or age group of persons affected.

Wage material for the period after the invasion is extremely fragmentary. Chinese coolies' wages were reduced. Early in 1943, Chinese laborers in Singapore were paid 80 cents per day; in 1941, Chinese coolies at the airdrome received higher rates, with $1 a day the minimum. On August 16, 1943, the military administration promulgated an ordinance governing wages of all workers in Malaya; wages were fixed and pensions provided for. The immediate effect of the measure was a considerable improvement in the wages and allowances of manual laborers. In November 1943, the Singapore Rubber Association was reorganized to become all-Malayan and its functions were expanded to include regulation of laborers' wages. Whether any action was taken is not known. A general salary increase took place for Government employees about the middle of 1943. Persons who spoke Japanese were in a favorable position wherever they were employed, and received higher wages than other employees.

The wages received are low under inflation conditions. Shortages of consumer goods and especially of rice affect the laboring classes greatly. As economic conditions have deteriorated and inflation has continued to grow, prices have been fixed for some 80 types of goods, including all necessaries, such as clothing, drugs, tires, and tubes. Restrictions on sales of most, and rationing of some, consumer goods were started. In August 1943 a survey was taken of stocks of all necessary goods. Shops were requested to report all commodities in their possession within 10 days. Apparently the situation is desperate for many thousands of city dwellers and unemployed mine and plantation workers.

## Absenteeism in Chile[9]

AN OFFICIAL study of absenteeism among 158,741 workers in 2,316 establishments in Chilean agriculture, industry, and commerce in October 1943 indicated that the average rate of absenteeism was 6.55 percent for the month, and that the rate of absenteeism was highest in agriculture, and lowest in commerce. The investigation by the General Labor Division was made at the request of the National Labor Council, and was conducted by means of a questionnaire to which 2,316

[9] Data are from report by Daniel L. Horowitz, senior economic analyst, United States Embassy at Santiago, May 15, 1944.

(out of a total of 56,534) establishments replied. The following statement shows in a general way the size of the reporting sample used.

| | *Reporting establishments* | |
|---|---|---|
| | *Number* | *Percent of all recorded establishments* |
| Total | 2,316 | 4.10 |
| Manufacturing | 1,544 | 11.51 |
| Commerce | 253 | 1.07 |
| Agriculture | 519 | 2.68 |

For the 2,316 establishments reporting, absenteeism was shown by 82.46 percent of agricultural undertakings, and by 79.85 percent of industrial establishments, but by only 43.08 percent of commercial companies. Absence from work was found to be highest in establishments having the largest number of workers and with the best average wage. Wages in establishments reporting absenteeism were on the average 65 percent higher than the average wages paid in establishments which did not show absenteeism. The information gathered in the questionnaire was limited to Monday, Tuesday, and Friday of each week during October 1943; it was assumed that Friday was a normal day. The percentages of absenteeism by activities and days, based upon the total number of workers who should have worked on the days covered by the questionnaire, are shown in the following statement:

| | *Percent of absenteeism* | | |
|---|---|---|---|
| | *Monday* | *Tuesday* | *Friday* |
| Average | 10.42 | 7.30 | 5.80 |
| Agriculture | 18.15 | 10.70 | 5.82 |
| Manufacturing | 9.43 | 6.89 | 5.87 |
| Commerce | 6.90 | 4.89 | 2.97 |

Tabulation of reasons for absence, given by 12,447 workers, indicated that 22.74 percent of the absences were due to sickness, 20.73 percent to other justified causes, and 56.45 percent to unjustified reasons. In the opinion of the employers, alcoholism was the cause of 70.84 of the absenteeism, sickness of 10.73 percent, and other causes of 18.41 percent. For questionnaire purposes, industrial accidents, of which the number was considerable, were included with sickness and other justified cause for absence.

The study showed that in the 1,770 establishments reporting absenteeism there was a total loss of wage-earner income of 8,387,851 pesos per month. Total loss of production, based upon employer information, amounted to 20,368,950 pesos per month. Establishments which applied fines for absenteeism had a higher percentage of absenteeism from sickness than those without a system of fines, whereas nonjustified absenteeism was higher in establishments which did not apply fines. This was attributed to the fact that fines cannot be applied for sickness. There was a smaller loss in wages in those establishments which had a system of bonuses and fines.

## British Government's Employment Policy

THE Government of Great Britain has accepted the maintenance of a high and stable level of post-war employment as one of its primary aims, and has issued a White Paper [10] outlining the official policy proposed to reach this goal. Responsibility for leadership in the future employment program has thus been assumed by the Government. It is stated in the report that fulfillment of the objectives sought depends upon (1) the Government's success in creating conditions favorable to maintenance of a high level of employment and (2) the understanding and support of the whole community—employers and workers particularly—in raising industrial efficiency. Increased productivity is required to insure high employment combined with a rising standard of living. Although the proposals deal with internal policy, the report recognizes that the level of employment and the standard of living in Great Britain depend upon international conditions, as imports and exports are basic to the country's economy. In this connection the Government has already given proof of its intentions by signing the Atlantic Charter and by other measures, but here again the responsibility is placed on industry to make the most of opportunities to recover the export markets and to find new outlets for British-made products.

### *Transition to Peace*

Plans for the transition from war to peace must be flexible. Conditions will be unsettled during the period between the end of hostilities with Germany and with Japan and for some time afterwards. It is estimated that 23 million men and women are either in the armed forces or in gainful employment—an increase of 4.5 million over 1939. About 80 percent of the employment in manufacturing industries is on Government work. In the transition, the trend will be toward private employment, and some 7 million workers are likely to change over. Many of these will not actually change their employment, as they will remain with the same firm. Others will have to change both their occupations and their place of employment. At the same time, production will shift from war weapons to civilian goods. If the change in demand were matched with supply, unemployment could be avoided immediately after the war. Time is required to gear for peace, however, just as it is needed to prepare for war. In this situation, the White Paper states, there is a threefold danger—

(*a*) That patches of unemployment may develop where the industrial system fails to adapt itself quickly enough to peacetime production.
(*b*) That demand may outrun supply and create an inflationary rise in prices.
(*c*) That civilian production, when it is resumed, may concentrate on the wrong things from the point of view of national needs.

Government action is promised to forestall these dangers but "it would be vain to imagine that patches of unemployment can be eliminated altogether in the transition period." The shift from war

[10] Great Britain. [Ministry of Reconstruction.] Employment Policy. London, 1944. (Cmd. 6527.)

to peace is not expected to be as abrupt as it was after 1918, but the Government is preparing to keep unemployment at a minimum, by—

(*a*) Assisting firms to prepare to switch over their capacity to peacetime production as quickly as possible;
(*b*) Finding out in advance where the skilled labor which will gradually become available for civilian work will be most urgently required;
(*c*) Arranging, so far as war conditions permit, that labor and raw materials will be forthcoming for urgent civilian work and insuring that the machinery of allocation devised in wartime will be adaptable to the special conditions likely to obtain after the end of the war in Europe;
(*d*) Arranging, so far as possible, that curtailments of munitions production shall take place in areas where the capacity and labor can be used for civilian products of high priority;
(*e*) Arranging that the disposal of surplus Government stocks shall not prejudice the reestablishment and development of the normal trade channels for producing and distributing similar goods; and
(*f*) Regulating the disposal of Government factories in such a way as to help towards the early restoration of employment.

Using the methods cited, plans are being worked out to promote the orderly expansion of peacetime industries. The guiding principle will be to insure that labor and capacity no longer needed for munitions shall be used for civilian goods of high priority. At the same time that industry is to be aided in producing for peace, measures are to be taken to prevent an inflationary boom from occurring while goods are still in short supply. This will necessitate retention of rationing and price control for some time, price subsidies (if the Government is supported by the cooperation of all sections of the public), continued saving, and controlled use of capital. After years of wartime restrictions these proposals are not expected to be altogether palatable to the public. However, the Government has given assurance that no control will be maintained longer than needed, and that there is no intention to permit nonessentials to be produced at the expense of essentials.

The length of the transition period cannot be estimated. War in the East may still continue while Britain is attempting to restore its export trade. Recuperative powers of modern productive technique are strong, however, and it may not be long before production becomes sufficient for all demands. When that occurs, the maintenance of an adequate level of expenditures on goods and services will no longer be realized automatically, and then a deliberate policy must be directed toward insuring the required volume of expenditures.

### *Prevention of Local Unemployment*

Specific proposals are made to check the development of localized unemployment in particular industries and areas during the transition period and for many years afterward. Reference is made to temporary unemployment caused by seasonal and other factors, as well as to longer-term unemployment that develops in particular industries and areas (known as distressed areas), owing to a temporary or permanent decline caused by technical change, the trend of fashion, or the growth of foreign competition. The problem of local unemployment, it is thought, can be attacked in three ways:

(*a*) By so influencing the location of new enterprises as to diversify the industrial composition of areas which are particularly vulnerable to unemployment.
(*b*) By removing obstacles to the transfer of workers from one area to another, and from one occupation to another.
(*c*) By providing training facilities to fit workers from declining industries for jobs in expanding industries.

Government policy is to be directed toward securing a balanced industrial development in areas that have been unduly dependent on industries specially vulnerable to unemployment. In influencing the introduction of diversified industries in these areas, strategic as well as industrial and social conditions will be considered. Necessary action will be taken to secure full development of basic services on which industry depends, and research will be undertaken to discover the most suitable types of industry. Need for legislation to deal with special (depressed) areas will disappear. These areas have not been depressed during wartime, and wartime experience has shown that production there can be efficient, but in special cases some of the workers may have to be established elsewhere. No single department of Government could conveniently undertake to formulate and administer the policy for the distribution of industry. It is a problem for the whole Government, but the report under review advocates a single channel through which public policy on the distribution of industry can be expressed.

In an expanding economy, workers must be ready and able to move freely between occupations. Immediately following the close of the war, problems of labor mobility will center mainly in the resettlement of members of the armed forces and of war workers. Plans for training have already been formulated and made public; they will continue in effect as long as needed. Where only brief training periods are required, employers should provide instruction on the job. A fundamental principle to be followed will be to furnish training as soon as the need is clear. The person will not be expected to wait until he has been unemployed for a long time before becoming eligible for retraining. Allowances to trainees are to be separated completely from unemployment benefits. The allowances are to be fixed at a scale above that for unemployment but not to yield a higher income than the wages the trainee is likely to receive in his first job following the course. Reliance is not to be placed primarily on large-scale labor transfers for a solution of unemployment problems in particular areas, but where transfer appears to be the suitable solution, efforts will be made to overcome some of the obstacles. Of these obstacles the lack of available housing for rent and the costs incident to settling down in a new environment are the most serious.

### *Conditions of High and Stable Employment*

Regardless of the smoothness and speed of the transition, long-term problems connected with maintaining an adequate and steady volume of employment will remain. If they are to be solved—

(1) Total expenditures on goods and services must be prevented from falling to a level where general unemployment appears.
(2) The level of prices and wages must be kept reasonably stable.
(3) There must be a sufficient mobility of workers between occupations and localities.

The Government is prepared to accept responsibility for taking action at the earliest possible stage to arrest a threatened slump. In maintaining total expenditures and thus avoiding an unfavorable foreign-trade balance, exports must be higher than before the war, everything must be done to limit dangerous swings in private investment, public investment must be planned carefully in timing and volume to offset unavoidable fluctuations in private investment, and

the Government must be ready to check and reverse the decline in expenditure on consumer goods which normally follows as a secondary reaction to a reduction in private investment.

Any public action to maintain expenditures will be useless unless wages and prices are kept reasonably stable. This is vital to any employment policy and, as such, must be clearly understood by all sections of the public. Employers and workers must be moderate in wage matters, so that increased expenditure at the onset of a depression may go to increase employment. Not every wage rate must remain fixed, but the principle of stability requires that a rise in the general level of wage rates shall be related to increased productivity. An undue advance in prices caused by factors other than wages would also adversely affect Government efforts to maintain employment. Stability of prices and wages being inextricably connected and vital to the success of an employment policy, the Government, employers, and labor must cooperate to insure their stability. In the White Paper, the Government accepts its responsibility and calls on workers and employers to examine their practices with a view to taking similar responsibility.

An adequate total demand for labor—maintained by a total expenditure sufficient to provide every worker with a job—would not result in the total disappearance of unemployment. Changes would always occur, and therefore on any given day numbers of persons would be registered as unemployed with employment exchanges. Such unemployment could be kept at a minimum if every individual exercised the fullest initiative. The Government pledges itself to assist in bringing men and work together and to prevent interference with labor mobility under plans whereby part-time work is supplemented by unemployment benefit. The report under review points out that it would be disastrous if the Government's efforts to maintain total expenditure were interpreted as an exoneration of citizens from the duty of fending for themselves.

### *Methods of Maintaining Expenditures*

It will be necessary to maintain a policy of cheap money for some time after the war, and the possibility of influencing capital expenditures by varying interest rates will be kept in view thereafter. Monetary policy alone, however, will not counteract the inherent instability of capital expenditure. Therefore, the Government will encourage privately owned enterprises to plan their own expenditures in conformity with a general stabilization policy. Public investment can be used more directly as an instrument of employment policy. Insofar as possible, public capital expenditures (which are made by local authorities and public-utility bodies chiefly) will be expanded during slump periods to offset the drop in private expenditures, and will be curtailed when private expenditures rise. On the basis of annual reports from local authorities, covering proposed capital expenditures for the ensuing 5 years, the Government will be able to set a target each year for the volume of public works during the next year. Efforts will be made also to reduce the time lag between the decision to undertake a public capital expenditure and the date of starting work. The opinion is expressed in the White Paper that "in the past the power of public expenditure, skillfully applied, to check the onset of a depression, has been underestimated."

If capital expenditures do not keep the level of business activity at a sufficiently high level, the Government assumes responsibility for influencing the community's expenditure on consumption by varying the weekly contributions of employers and employed under the new system of social insurance. The standard rate of contribution would be assessed on the basis of forecast unemployment, in order to keep the fund in balance over a number of years. Actually, the rate of contribution would exceed the standard rate when unemployment fell below the estimated average level, and would be less than that standard in times of heavier unemployment. Other devices were examined for influencing the volume of consumption—such as variation of tax rates, the incorporation of some system of deferred credits as a permanent feature of national taxation, and Government purchase of certain consumer goods—but no specific proposals were made.

None of the main proposals involves deliberate planning for a deficit in the national budget in years of subnormal trade activity. The policy of steadily decreasing the dead-weight debt, when other forms of indebtedness are increasing, does not in the opinion of the Minister of Reconstruction mean a rigid policy of balancing the budget each year. Undue growth in the national debt would be reflected quickly in loss of confidence, but it would be no less serious to have a budgetary deficit arising from a fall in revenue caused by depressed industrial and commercial conditions. To control the situation the Government must take into account the need for maintaining national income and budgetary equilibrium, thereby insuring the confidence in the future that is necessary to a healthy and enterprising industry.

### *The Policy in Practice*

Public control such as is outlined in the White Paper can be extended only as experience accumulates. It is intended to establish a permanent staff to measure and analyze economic trends and to "submit appreciations of them to the Ministers concerned," to guide them in taking the right action at the right time. The chief classes of statistics (in addition to those available before the war) which are to be assembled for the efficient operation of an employment policy are as follows:

(*a*) Statistics of employment and unemployment, including quarterly or monthly statements of present and prospective employment in the main industries and areas in the country, based on returns from employers.

(*b*) Regular information relating to savings, projected capital expenditure by public authorities, and, as far as possible, by private industry.

(*c*) An annual census of production showing the structure of the main groups of industries in the preceding year, including, inter alia, details of the quantity and value of output, stocks, and work in progress.

(*d*) Monthly figures of production, consumption and stocks, and, if possible, figures of orders on hand, based on sample returns obtained periodically throughout the year from large firms, trade associations, and public institutions.

(*e*) Annual and quarterly estimates of foreign capital movements and balance of foreign payments.

It is also proposed to make a more complete annual analysis of the constituents of the national income. Analysis of the financial position will be the basis for determining what measures are required to maintain employment and to secure a rising standard of living. At every stage, parallel studies should be made of the manpower situation by the Ministry of Labor and National Service. Correla-

tion of the complementary budgets for total expenditure and for manpower will play a vital part in the formulation of Government policy for the maintenance of employment. The Government expresses the opinion in the White Paper that the chances of maintaining a high and stable employment will be better than ever before when the war is won, and that this can be accomplished without sacrificing the essential liberties of a free society.

### *Parliamentary Debate on the White Paper*

When the White Paper was debated in the House of Commons on June 21–23, inclusive, it was well received. At the close of the debate a motion was unanimously adopted, stating that the House welcomed "the declaration of His Majesty's Government accepting as one of their primary aims and responsibilities the maintenance of a high and stable level of employment after the war." Although a small group regarded the motion "as being question-begging almost to the point of fraudulence," the members of the group did not vote against it, having made their objections a matter of record in the course of the debate. An amendment to the motion, to the effect that full and stable employment cannot be achieved while the major resources are privately owned, was rejected on the ground that it would have limited the debate. Regardless of political party, many members of the House of Commons expressed satisfaction that the Government had outlined a policy upon a subject on which it had not taken a stand previously. For example, one member stated that he welcomed the attempt to deal with the employment problem more than the actual terms.

Reference was made to avoidance of the use of the term "full" employment in the White Paper. Doubt was expressed that unemployment could be done away with under a system of free enterprise. One member held that the problem was practically insoluble and that only totalitarian governments can deal with unemployment; he asked which was of greater long-run importance, freedom of individual choice or unemployment. Another member said that the British disliked government control but could not afford to leave the system free and therefore had the choice between two evils. The Chancellor of the Exchequer stated that it was intended to reduce unemployment to a minimum and that the Government could not say more.

Depending upon their individual philosophy, members argued for a greater or lesser degree of public ownership as opposed to private enterprise. On this problem the White Paper takes no sides and spokesmen for the Government maintained that the problem was outside the scope of the report. A labor member criticized a policy allowing private enterprise a large degree of play in reorganizing employment policy.

Discussion dealt with the possible reduction in social-insurance contributions in slack times. Members in some cases tended to minimize the effectiveness of such a step as a means of preventing a downswing. Attention was also directed at the more important countermeasure, namely to increase public works when private business is shrinking. On this subject a member stated that it would require a great deal of convincing to show that a public-works plan can have quick results and can be stopped promptly when the need for it no

longer exists. Another pointed out that the Government cannot expect to deal with fluctuations unless it deliberately, and not by accident, unbalances the budget on occasions. Still another speaker stated that modern economic thought demands that the budget shall be unbalanced to influence employment materially and added that the Government should state its position clearly.

Regarding the place of exports, all shades of opinion were expressed. Certain members with business connections were not hopeful that the target of a 50-percent increase could be reached. One speaker expressed concern that preparations were not being made for resumption of trade, while another deplored that the export drive was being placed before civilian necessaries, and that both were placed before the production of capital goods to restart industry.

Throughout the discussion members tended to expect concrete plans from the Government. Therefore, on the last day of the debate, the Minister of Production made a statement on the Government's position, to the effect that the White Paper dealt with unemployment but not its cure. By intention, no legislative or administrative details were included. He agreed with the Chancellor of the Exchequer's approach in saying that "the White Paper was designed to cure the problem under a system which permitted both public ownership and private enterprise." If members of Parliament agree that this is correct and the policy outlined in the White Paper commends itself to Parliament, the Government will take necessary measures to carry it out.

## Vacations With Pay in New Zealand [11]

THE New Zealand Parliament, on April 4, 1944, passed legislation providing for an annual vacation with pay for every worker not already entitled to a more favorable leave under industrial awards, agreements, or contracts of employment. The effective date of the measure is August 1, 1944. The vacation period is 2 weeks, at ordinary rates of pay, to become due on completion of each year of service. The qualifying period may date back to not more than 12 months before August 1, 1944. Such a vacation is to be in addition to statutory holidays, and, if a special holiday for which a worker is entitled to payment occurs during the leave, the vacation period is to be increased by 1 day. The vacation must be granted within 6 months after it becomes due, and, if the worker and the employer so agree, may be taken wholly or partly in advance.

If employment is terminated after the worker has become entitled to the leave but before he has taken it, the employer is required to pay the worker the vacation pay due. Workers employed for less than 1 year but for 3 months or more are entitled, on termination of employment, to a payment in cash to cover the proportion of the vacation period earned; those employed less than 3 months receive the proportionate payment in stamps, redeemable at the end of 1 year. Penalties for offenses against the act may not exceed £10, plus (if the offense is a continuing one) a further penalty not exceeding £2 for every day during which the offense continues.

[11] Data are from report by Basil D. Dahl, commercial attaché, United States Legation at Wellington, May 2, 1944 (No. 102).

## Standards for Priority Referral

STANDARDS governing minimum national referral programs were made public by the War Manpower Commission on June 21, 1944.[1] The Commission stated that regional and area management-labor committees are responsible for developing and recommending to their respective directors fair and reasonable standards to safeguard the rights of workers and employers subject to the referral programs. These programs are to pay particular attention in their respective areas to the following matters:

To the greatest degree consistent with war needs, workers subject to priority referral are to be given freedom of choice as to the jobs they wish to accept, and employers are to be given a similar privilege regarding the workers they wish to employ.

In offering the worker successive job opportunities on the basis of their relative urgency in the war effort, due consideration is to be given to the individual's qualifications and his prior rate of pay or earnings. At the same time, however, if the regional or area manpower director determines that the labor demands of the area or region cannot be met unless limitations are placed on the jobs offered to a worker, such limitations may be applied. On the other hand, no limitation is to be placed upon the number of jobs of substantially equal or greater manpower urgency which may be offered, and no limitations are to be applicable to a job offer which the worker has good cause for refusing. Further, the refusal of a worker, without good cause, to accept referral is not to prejudice his right to subsequent referrals.

A worker will be considered to have "good cause" for refusing a referral, without prejudice to further offers, to (1) jobs involving under-utilization of skill or less than full-time work; (2) jobs in which wages or working conditions are not reasonably comparable to those prevailing for similar employment in similar establishments in the community; (3) jobs, the acceptance of which would, over an objection presented in good faith by the worker, require him to join or resign from or refrain from joining a labor organization.

## Creation of Office of Labor Advisory Committees in WPB

CREATION of an Office of Labor Advisory Committees and the establishment of administrative procedures through which the War Production Board will consult with labor on problems of war output, production readjustments, and planning for reconversion were announced by the WPB on June 17, 1944.[2]

[1] War Manpower Commission, Field Instruction No. 416, Supplement No. 1, June 21, 1944. For the establishment of the Priority Referral System, see Monthly Labor Review, July 1944 (p. 87).
[2] War Production Board, Press release, June 17, 1944.

The Office of Labor Advisory Committees will be part of the WPB Office of Labor Production and its functions will be carried out jointly by a representative of the Office of Labor Production and by a representative of the Office of Manpower Requirements. The new office will provide a formal place in the structure of WPB for the 14 active labor advisory committees, so that their status and functions will be clearly defined in the same way as the 769 existing industry advisory committees.

In describing the new office and related operating procedures, the Chairman of the War Production Board stated, "It is the policy of the War Production Board, through the medium of labor advisory committees, to secure the assistance of labor in the solution of production programs and to promote maximum cooperation between the Government and labor in the formulation and execution of official program."

The currently active labor advisory committees of WPB include the following:

Automobile Labor Advisory Committee.
Anti-Friction Bearings Labor Advisory Committee.
Electric Flat Iron Labor Advisory Committee.
Foundry and Forge Shop Labor Advisory Committee.
Flat Iron Labor Advisory Committee.
Jewelry Labor Advisory Committee.
Domestic Laundry Equipment Labor Advisory Committee.
Machine Tools Labor Advisory Committee.
Printing and Publishing Labor Advisory Committee.
Radio and Radar Labor Advisory Committee.
Mechanical Refrigerator Labor Advisory Committee.
Wrought Iron Labor Advisory Committee.
Steel Industry Labor Advisory Committee.
Logging and Lumber Labor Task Committee.

## Measures for Control of Labor in Hungary[3]

THE increasing intensity of the manpower shortage in Hungary is indicated, by several recent decrees adding more drastic regulations to existing provisions for labor control.

Early in May 1944 the Minister of Agriculture issued a decree authorizing the use, on agricultural projects, of those workers who are subject to compulsory work for national defense. Under the new decree, workers conscripted for national service may be used in industrial enterprises, "to repair damage done to agricultural enterprises by air raids, and to continue agricultural work interrupted by air action." The appropriate authority in an agricultural community may order persons engaged in agricultural activities to work a certain number of days during the year in public agricultural enterprises. The decree stipulates the number of days to be worked by each farmer and the members of his family. Persons engaged in agricultural work as their main means of subsistence will no longer be permitted to engage in any other kind of work unless the competent agricultural inspector authorizes them do so. On the other hand, the decree provides that peasants or persons engaged as agricultural laborers may be drafted for compulsory labor in industrial or mining enterprises only with the specific approval of the Ministry of Agriculture.

[3] Data are from a report from the American Consulate General at Istanbul (No. 3101) of June 13, 1944.

Identity cards on which the employer enters the amount of work performed have been introduced for agricultural workers. Persons not complying with the new regulations may be deprived of their food rations and milling privileges.

A further decree of May 1944 provides that the Government may "take by force to labor camps all those who leave their jobs or remain absent without permission." Internment "for a certain period of time" is threatened for persons who perform their work inefficiently or carelessly.

Further evidence of the manpower shortage is given by a decree issued by the Ministry of War which provides that all persons liable for military service who were born between 1909 and 1914 and had been found unfit for military service prior to December 31, 1938, must present themselves at the recruiting stations between May 15 and July 21, 1944. The decree apparently concerns the reclassification of all these men in the 30 to 35 age group.

# *Industrial Accidents*

## Industrial Injuries, April 1944

WORK injuries disabled approximately 64,000 employees of manufacturing plants and caused the loss of about 1,280,000 man-days of productive effort during April. In terms of actual exposure to work hazards, disabling injuries occurred at the rate of 20.2 for each million employee-hours worked in manufacturing during the month. This rate represents a continuation of the upward trend in the all-manufacturing injury-frequency rate which has been evident in the rates for the first three months of 1944. In January the all-manufacturing injury-frequency rate was 18.0; in February it was 18.9; and in March it was 19.3. The cumulative rate for the entire 4-month period was 19.0.

The April estimates are based upon reports from 10,707 manufacturing plants. These reports listed a total of 20,963 disabling injuries. The reporting plants employed 5,342,000 workers during April, or about one-third of the Bureau of Labor Statistics estimate of total manufacturing employment for the month. The estimate of time lost is based upon the conservative allowance of 20 days for each disabling injury and excludes all economic losses resulting from the many cases of death and permanent physical impairment included in the totals. The frequency rates given are based upon the entire volume of reports and are not weighted.

At the end of April, 0.5 percent of the injuries reported during the month were known to have been fatal and 3.8 percent had definitely developed into permanent physical impairments. It is reasonably certain, however, that these proportions of serious injuries will be increased when the final outcome of the injuries presumed to be only temporary at the end of March becomes known.

Forty-three of the eighty-three individual manufacturing industries for which both March and April data were available had increases of at least one full point in their April frequency rates as compared with March. Twenty-three of these were significant increases of 5 or more frequency rate points. In contrast, however, there were 23 decreases of at least a full point, of which 9 were decreases of 5 or more points.

For 32 industries the April averages were the highest monthly rates so far recorded in 1944. Fourteen industries on the other hand had lower frequency rates in April than in any other month of 1944. The lowest industry average for April was that of the women's clothing plants, 4.6. The highest April frequency rate was 57.0 for sawmills.

On a cumulative basis the 1944 injury experience in manufacturing continues to show improvement over that of 1943. The all-manufacturing cumulative frequency rate for the first 4 months of 1944 was 19.0, compared with 20.0 for the full year of 1943. Among the 58

industries for which cumulative data for both periods were available, there were 24 with 4-month rates for 1944 one or more points below their 1943 averages, and only 15 with 1944 cumulative rates which were as much as a full frequency rate point higher than the 1943 averages. There were, however, 6 industries with cumulative rates of over 40 disabling injuries for every million employee-hours worked during the first 4 months of 1944. These were as follows: Sawmills, 55.0; wooden containers, 54.1; plate fabrication and boiler-shop products, 52.5; sheet-metal work, 52.5; foundries, iron and steel, 42.4; and planing mills, 41.9. The lowest cumulative frequency rates for the first 4 months of 1944 were the following: Explosives, 4.6; women's clothing, 5.3; rayon and allied products (chemical), 6.6; sighting and fire-control equipment, 7.7; radios and phonographs, 8.8; aircraft, 9.0; cement, 9.1; soap and glycerin, 9.2; iron and steel, 9.5; and petroleum refining, 9.9.

*Industrial Injury-Frequency Rates [1] for Selected Manufacturing Industries, April 1944, with Cumulative Rates for 1944*

| Industry [2] | April 1944 | | Frequency rate | |
|---|---|---|---|---|
| | Number of establishments | Frequency rate [3] | 1944: January–April cumulative [3] | 1943: 12-month cumulative [4] |
| Agricultural machinery and tractors | 37 | 26.4 | 21.8 | 18.9 |
| Aircraft | 57 | 9.5 | 9.0 | 9.7 |
| Aircraft parts | 226 | 11.9 | 12.4 | 14.6 |
| Ammunition, 20 mm. and over | 324 | 34.8 | 23.2 | 24.8 |
| Ammunition, small-arms | 18 | 7.7 | 10.2 | 16.0 |
| Baking | 7 | 13.2 | 14.0 | (5) |
| Bolts, nuts, washers, and rivets | 30 | 30.4 | 33.3 | (5) |
| Book and job printing | 43 | 8.4 | 11.7 | (5) |
| Boots and shoes, other than rubber | 286 | 14.6 | 15.8 | 14.0 |
| Canning and preserving | 58 | 23.8 | 22.6 | 19.4 |
| Cement | 81 | 8.6 | 9.1 | 8.7 |
| Chemical products, not elsewhere classified | 40 | 18.4 | 16.2 | (5) |
| Chemicals, industrial | 273 | 14.7 | 16.0 | 18.3 |
| Clothing, men's | 482 | 11.6 | 11.8 | 8.5 |
| Clothing, women's | 367 | 4.6 | 5.3 | 5.4 |
| Commercial and household machines | 43 | 32.0 | 18.1 | (5) |
| Concrete, gypsum, and plaster products | 113 | 41.0 | 33.9 | (5) |
| Confectionery | 7 | 16.0 | 16.0 | (5) |
| Construction and mining machinery | 65 | 34.7 | 27.9 | 31.8 |
| Cotton goods | 194 | 14.0 | 14.6 | 16.0 |
| Drugs, toiletries, and insecticides | 50 | 19.2 | 22.6 | 22.2 |
| Dyeing and finishing | 48 | 23.2 | 23.3 | (5) |
| Electrical equipment and supplies | 437 | 12.3 | 11.1 | 11.1 |
| Engines and turbines | 39 | 12.2 | 12.8 | 18.3 |
| Explosives | 65 | 8.9 | 4.6 | 11.9 |
| Fabricated structural steel | 100 | 32.8 | 33.0 | 33.0 |
| Food products, not elsewhere classified | 34 | 22.1 | 22.3 | (5) |
| Forgings, iron and steel | 112 | 30.9 | 33.3 | 39.9 |
| Foundries, iron and steel | 536 | 39.5 | 42.4 | 42.1 |
| Furniture, except metal | 61 | 35.5 | 31.2 | 28.1 |
| General industrial machinery | 518 | 27.4 | 23.6 | 24.3 |
| Glass | 34 | 19.6 | 19.3 | 17.9 |
| Guns and related equipment | 10 | 13.1 | 18.8 | 17.6 |
| Hardware | 27 | 19.1 | 19.4 | 24.3 |
| Heating equipment, not elsewhere classified | 43 | 36.5 | 34.7 | 34.2 |
| Iron and steel | 176 | 9.8 | 9.5 | 9.8 |
| Iron and steel products, not elsewhere classified | 278 | 26.7 | 25.4 | (5) |
| Knit goods | 77 | 11.4 | 10.4 | (5) |
| Leather | 25 | 39.1 | 28.9 | (5) |
| Leather products, not elsewhere classified | 28 | 22.8 | 23.8 | (5) |
| Machine shops, general | 200 | 24.0 | 29.9 | 26.2 |
| Metalworking machinery | 575 | 21.9 | 17.6 | 18.9 |

See footnotes at end of table.

*Industrial Injury-Frequency Rates [1] for Selected Manufacturing Industries, April 1944, with Cumulative Rates for 1944*—Continued

| Industry [2] | April 1944 | | Frequency rate | |
|---|---|---|---|---|
| | Number of establishments | Frequency rate [3] | 1944: January–April cumulative [3] | 1943: 12-month cumulative [4] |
| Miscellaneous lumber products, not elsewhere classified | 42 | 42.5 | 39.9 | (5) |
| Miscellaneous manufacturing | 328 | 17.8 | 17.4 | (5) |
| Motor vehicles | 96 | 13.1 | 11.7 | 12.4 |
| Motor-vehicle parts | 48 | 44.0 | 25.4 | 25.5 |
| Nonferrous-metal products | 555 | 32.3 | 25.7 | 23.7 |
| Ordnance and accessories, not elsewhere classified | 25 | 24.1 | 19.4 | (5) |
| Paints and varnishes | 55 | 31.3 | 21.7 | 20.2 |
| Paper | 207 | 32.7 | 28.7 | 31.7 |
| Paper boxes and containers | 438 | 26.7 | 25.0 | 26.7 |
| Paper products, not elsewhere classified | 19 | 15.8 | 17.1 | (5) |
| Paper and pulp (integrated) | 81 | 27.3 | 26.4 | 28.4 |
| Petroleum refining | 106 | 11.5 | 9.9 | (5) |
| Planing mills | 36 | 43.5 | 41.9 | 53.8 |
| Plate fabrication and boiler-shop products | 76 | 49.5 | 52.5 | 44.0 |
| Plumbers' supplies | 19 | 39.9 | 15.6 | 18.2 |
| Pottery | 36 | 19.6 | 17.5 | (5) |
| Radios and phonographs | 139 | 10.1 | 8.8 | 7.6 |
| Railroad equipment | 41 | 27.0 | 20.9 | 20.3 |
| Rayon and allied products (chemical) | 10 | 10.4 | 6.6 | 7.8 |
| Rubber boots and shoes | 13 | 13.0 | 19.8 | (5) |
| Rubber and rubber products, not elsewhere classified | 70 | 18.5 | 19.1 | (5) |
| Rubber tires | 27 | 13.3 | 13.4 | 13.7 |
| Sawmills | 34 | 57.0 | 55.0 | 62.4 |
| Screws and screw-machine products | 44 | 24.4 | 26.3 | (5) |
| Sheet-metal work | 41 | 44.0 | 52.5 | (5) |
| Shipbuilding | 268 | 24.6 | 24.6 | 26.7 |
| Sighting and fire-control equipment | 24 | 13.0 | 7.7 | 5.6 |
| Silk and rayon products, not elsewhere classified | 49 | 16.0 | 15.7 | (5) |
| Slaughtering and meat packing | 146 | 34.0 | 31.2 | 33.7 |
| Small arms | 51 | 16.7 | 12.4 | 11.5 |
| Smelting and refining (nonferrous metals) | 110 | 22.6 | 23.0 | 20.5 |
| Soap and glycerin | 12 | 11.8 | 9.2 | 8.5 |
| Special industry machinery | 63 | 27.3 | 20.4 | 22.7 |
| Stamped and pressed metal products | 223 | 29.2 | 29.3 | 31.1 |
| Steam fitting and apparatus | 35 | 21.4 | 27.8 | 33.6 |
| Stone, clay, and glass products, not elsewhere classified | 65 | 15.8 | 12.7 | (5) |
| Tanks, military | 10 | 15.3 | 11.5 | 12.6 |
| Tank parts, military | 47 | 19.7 | 25.6 | 18.3 |
| Textile and textile-mill products, not elsewhere classified | 156 | 21.7 | 18.0 | (5) |
| Tin cans and other tinware | 21 | 18.9 | 18.9 | 18.3 |
| Tools, except edge tools | 70 | 32.3 | 28.8 | 23.5 |
| Wire and wire products | 132 | 24.6 | 21.6 | 21.7 |
| Wooden containers | 50 | 51.5 | 54.1 | (5) |
| Woolen goods | 149 | 18.9 | 18.7 | (5) |

[1] The frequency rate represents the average number of disabling industrial injuries for each million employee-hours worked.

[2] A few industries have been omitted from this table because the coverage for the month did not amount to 1,000,000 or more employee-hours worked.

[3] Computed from all reports received for the month. Not based on identical plants in successive months.

[4] Computed from all reports received for the month; not based on identical plants in successive months. Preliminary rates for the year subject to revision on the basis of the more comprehensive annual survey

[5] Not available.

# *Cooperation*

## European Cooperatives and Their Possibilities for Post-War Reconstruction

### *Summary*

JUST before the outbreak of war, membership in the nearly 575,000 cooperative associations in Europe exceeded 111½ millions. Over half (54 percent) of the membership was in the Soviet Union, 12 percent in other now Allied or neutral countries, 20 percent in territory occupied by the Axis in the war, and 14 percent in Axis countries.

Practically without exception the movement had recovered from the depression by 1937 and was well on the upgrade.

In the Allied and neutral countries the movement has continued to advance even under war conditions. Such information as is available indicates that the same is true in the Axis and satellite countries (except Germany and Austria), although the cooperatives are usually under strict control by the Government.

After the rise of National Socialism in Germany (and, later, in Austria), it became apparent that the democratic make-up and social ideals of these cooperative organizations were the exact antithesis of the "New Order." To this was added, in the case of the consumers' cooperatives, the fact that they were competitors of the retail tradesmen, of whom the Hitler regime was the avowed champion. It was natural, therefore, that the consumers' cooperatives in those countries were at once marked for destruction. After the beginning of the war, as one country after another fell before the German war machine, consumers' cooperatives received the unfavorable attention of the Nazis in all countries except where (as in Belgium, Denmark, and the Netherlands) they were desirous of winning the people's good will.

Even in the other countries, after the initial destruction that was characteristic, other factors operated to deter the Germans in their onslaught on cooperatives. The cooperatives represented—as did the labor unions also—a structure built by the people themselves, representing their aspirations and their desires. Not only did the cooperatives supply their members' physical needs for food, clothing, housing, medical care, etc.; in some countries these associations were also essential in the social and cultural fields and had thus become an integral part of all phases of daily life. Further, cooperation loomed large in the economy of the countries themselves. Cooperatives had become the largest single enterprise in certain States and as such were a factor to be reckoned with. These considerations retarded the program of destruction (even in Germany itself, nearly 10 years elapsed before the consumers' cooperatives could be suppressed entirely). Furthermore, the Nazis found cooperative facilities necessary—in

some cases indispensable—to the functioning of the processes of production and distribution in the territories they invaded; they therefore used them and in some cases even fostered their growth.

It is believed that, because of the strong hold of the cooperatives upon the workers of Europe, the movement can be revived rather quickly where it has been destroyed, and where it still exists can be utilized immediately after the cessation of hostilities as a practical and effective form of machinery in the immense tasks involved in the reconstruction of Europe and the redirection of energies toward peacetime pursuits. This will involve no new form of organization for the millions of cooperators; it will be merely a resumption of the activities that were formerly a normal and accepted part of their lives.

### *Types of Cooperatives and Extent of Development*

Of over 800,000 cooperative associations of all types in existence throughout the world in 1937, nearly 575,000 were in the various countries of Europe (including the Soviet Union). Among the European cooperatives, the Soviet Union accounted for 50 percent, the other countries still free or neutral in the present war [1] for 6 percent, the countries that have been occupied by the Axis armies [2] for 28 percent, and Axis countries [3] for 16 percent of the associations. Nearly 70 percent of the cooperatives were farmers' marketing and processing associations; and a large part of the associations classified as credit were also farmers' organizations.

The consumers' cooperatives, which constituted slightly over 8 percent of the total number of associations in that year, had slightly over 53 percent of the total membership. The greatest relative development of this type of association was in the Allied and neutral countries, where consumers' cooperatives accounted for 67 percent of the total membership; if the U. S. S. R. is excluded, the proportion in these countries was 80 percent.

Naturally, the relative strength of the consumers' cooperatives was greatest in the industrial countries (as in Belgium, Great Britain, and Switzerland), and that of the agricultural associations in nations where the economy was still rural (Latvia, Ireland). Finland and Hungary, largely agricultural, were exceptions; there the consumers' cooperatives' members (many of whom were farmers) exceeded those of the agricultural marketing and processing associations. In France, Italy, Sweden, and Switzerland, cooperative membership was about equally divided between consumers' and agricultural cooperatives. Notwithstanding the State's absorption of the urban consumers' cooperatives in 1935 in the Soviet Union, the membership of the consumers' cooperatives there far outstripped that of the agricultural cooperatives. Cooperative credit predominated in such countries as Bulgaria, Czechoslovakia, Estonia, Greece, Latvia, Lithuania, Rumania, and Yugoslavia. Relatively even development among the three main branches of cooperation—consumers', credit, and agricultural—had taken place in the Netherlands. The same was true in Germany in 1937, but this had resulted from the losses sustained by

[1] Great Britain, Iceland, Ireland, Portugal, Soviet Union, Spain, Sweden, and Switzerland.
[2] Belgium, Czechoslovakia, Denmark, Estonia, France, Greece, Latvia, Lithuania, Luxemburg, Netherlands, Norway, Poland, and Yugoslavia.
[3] Austria, Bulgaria, Finland, Germany, Hungary, Italy, and Rumania.

the consumers' associations under the antagonism of the Nazis and the gains made by the agricultural associations which were in favor or at least unhindered.

Workers' productive and labor-contracting associations accounted for a substantial part of the total number of cooperators only in Bulgaria. Even in other countries where they can be said to have attained a fair degree of success (France, Italy, Soviet Union), their membership never attained the level of 10 percent of the total.

Most of these types of associations should prove useful in the post-war reconstruction work—the consumers' associations in the distribution of food and household necessaries, the agricultural associations in the inauguration of farming activities in devastated regions, and in other countries in the collection, processing, and marketing of the crops. Certain special types of cooperatives, described in succeeding pages, might also be utilized.

### ORGANIZATIONS FOR SOCIAL WELFARE

*Medical care and sanitation.*—In Belgium, "La Prévoyance," an insurance association at Brussels serving the consumers' cooperative movement, maintained three welfare establishments—one for convalescent adults, and the others giving medical care to children having or threatened with tuberculosis. At all of these it had laboratories working in preventive medicine. In addition it had a 125-bed sanitarium for men with tuberculosis, and 4 medical advisory centers open to the general public as well as members.

One large Czechoslovak association ran a home at which invalid children were given free care. Since 1904 the cooperative associations in Denmark had had a cooperative sanitarium at Skive, to which over 1,000 associations with nearly 360,000 members were affiliated.

In France the experience gained by cooperatives after the first World War should be of assistance in the present time. Refuges for care of orphan children were established at that time by individual associations, leading later to the formation of a central association, "L' Enfance Coopérative," at Paris, for operating holiday homes. In addition it had a 100-bed tuberculosis sanitarium, open all year, for the treatment of children. In recent years the accommodations of this association have been opened to Spanish refugee children and children evacuated from areas of political and military conflict. Its facilities were also utilized by the public health authorities and others. The Cooperative Union of Paris had a medical, dental, and surgical clinic and a pharmacy, and the regional association at Limôges was, just before the outbreak of war, converting its vacation home into a sanitarium for preventive care against tuberculosis.

"De Volharding" at the Hague—the second largest distributive cooperative in the Netherlands—had a sick-fund and medical-care department with 82,000 members and had since 1939 operated its own hospital. The sick-fund associations throughout Holland, many of which were connected with consumers' cooperatives, had their own drug association, "Copharma," through which their medical supplies were purchased.

In Poland a number of cooperative health associations had been established, each of which served an area of 6 to 10 villages and had

its own dispensary, a full-time physician, and sometimes a midwife. The physician, in addition to his regular duties, gave advice on infant care, housing conditions, and personal and social hygiene. In some cases associations arranged for a weekly dental clinic.

The health and sanitation cooperatives in Yugoslavia were started as an outgrowth of American relief work after the end of the first World War, as an aid in improving the appalling conditions in rural areas. The work of these associations has been of three types: Curative medicine, preventive and social medicine, and rural sanitation work. The headquarters of these organizations had a staff of physician and nurse or midwife, and provided consulting-room, dispensary, lecture-room, and bed facilities. By 1937 there were 171 of these associations, with nearly 111,000 members. They had their own federation, started in 1922, which in 1938 organized a traveling dental clinic. A wide range of educational work in social hygiene, measures to prevent disease, and rural sanitation was carried on, enlisting the interest not only of members but of whole villages.

Among the Axis and satellite nations, only Bulgaria and Hungary had associations in this field. In Bulgaria at the end of 1939 there were 30 associations with 16,616 members, classified in the official statistics as engaged in "health and public works activities." In 1934 a cooperative hospital was opened in Burgas on the Black Sea. This hospital represented the joint effort of cooperative associations of various kinds, individuals (including doctors), and even the city and national governments. Its success led to numerous others, and in 1935 a law was passed setting standards for medical-care cooperatives.

In Hungary the cooperative wholesale ("Hangya") and the Central Institute of Cooperative Credit had established a modern cooperative hospital in Budapest in 1922. This hospital was enlarged in 1938.

*General welfare activities.*—The Belgian cooperative movement was outstanding for its interest in social welfare. A large share of the workers' cooperative associations' earnings was used to provide social and recreational facilities for the community as well as the members. The so-called "Peoples' Houses (*Maisons du peuple*) of Belgium were known the world over. Probably nowhere have the cooperative associations done more to improve the moral, cultural, and social, as well as the economic, status of the members. This was especially true of the associations formed by the industrial workers, which were early advocates of general manhood suffrage and also supported trade-union movements to improve working conditions.

Cooperative associations in Czechoslovakia also had numerous "people's houses."

The Cooperative Union of Paris, "L'Enfance Coopérative" (previously mentioned), and the Cooperative Union of the Somme had holiday accommodations for between 6,000 and 7,000 children, which could undoubtedly be utilized (if still intact) as sanitariums for nursing back to health the children undernourished because of war conditions. The same use might also be made of the orphanage and the aged members' home run by the national federation of workers' productive associations in France.

Of Yugoslav cooperatives it was said that all were interested in cultural and welfare activities. Examples were the vacation resort of the Railwaymen's Cooperative Association and the day nurseries run by one of the large credit associations.

Among the Axis countries cooperatives in Bulgaria and Germany showed some activity in the welfare field. In Bulgaria the Cooperative Savings Insurance Society of Bulgarian Civil Servants—the largest cooperative insurance association in the country—carried on extensive welfare activities, including the operation of holiday homes and provision of medical care for its members, as well as a laboratory for chemical research. The consumers' cooperatives of Germany devoted part of their surplus earnings to such welfare purposes as burial funds, convalescent and holiday homes, and unemployment relief. The cooperative wholesale (G. E. G.), and the cooperative association of Hamburg each had a holiday home; in these two resorts 210 persons could be accommodated at a time. There was at Jena a special holiday cooperative which ran 12 summer vacation places. In view of the dissolution of the consumers' cooperatives in Germany it is doubtful that these facilities are still in cooperative possession.

### HOUSING AND CONSTRUCTION ASSOCIATIONS

Among the most helpful associations in the devastated areas should be the housing associations, already versed in the techniques of apartment-building and house construction and other problems encountered in connection therewith. The accompanying statement shows, for such countries as information is available, the number and membership of the housing associations in 1937.

| | *Number of associations* | *Members* |
|---|---|---|
| Occupied countries: | | |
| Belgium | [1] 125 | [2] |
| Czechoslovakia | 1,340 | 79,000 |
| Greece | [3] 946 | [2] |
| Netherlands | 414 | [2] |
| Norway [4] | 10 | 1,600 |
| Poland | 330 | 23,000 |
| Allied or neutral countries: | | |
| Great Britain | 356 | 38,438 |
| Sweden | 1,000 | 40,000 |
| Switzerland | 250 | [2] |
| Axis countries: | | |
| Austria | 290 | 38,711 |
| Germany | 3,630 | 680,000 |
| Hungary | [5] 105 | [2] |
| Italy | 900 | 71,000 |

[1] Data relate to 1938.
[2] No data.
[3] Data relate to 1936 and include building and loan associations.
[4] Data relate to 1934.
[5] Data relate to 1935.

Statistics published by the Czechoslovak Government for 1934 showed that the 787 reporting cooperative housing associations (of 1,418 in existence) had constructed 24,365 houses. In Denmark, cooperative credit associations and the Government participated, with the housing associations themselves, in the financing of residential building. In 1937 the 17 housing associations (with about 13,000 members) belonging to the Danish Federation of Workers' Cooperative Building and Housing Associations constructed dwellings totaling 6,847,000 kroner in value. Aggregate income from the buildings controlled by all the associations amounted to 8,870,000 kroner for the year. In Finland a central organization for housing construction,

"Haka," was formed by joint action of the consumers' cooperative association of Helsinki, one of the cooperative wholesales, and an organization for the improvement of housing.

Such housing associations as existed in France were of the savings and loan type, financing construction rather than undertaking it themselves. In May 1935 there were 460 associations of this kind. Most of the associations in Great Britain were also of this type; of 1,333 associations, in 1937, this group accounted for 977. Also, the associations that constructed housing were for the most part only semicooperative. However, the dwellings built by them included a considerable number erected by retail cooperatives of the consumers' movement, which used their surplus funds for this purpose.

Prior to the rise of National Socialism in Germany, cooperative building associations were of considerable significance there. In 1927, for example, they accounted for 78,426, or 28 percent of all dwellings constructed in Germany, and for over 68 percent of those erected in Berlin. The central federation, "Hangya," in Hungary had constructed numerous dwellings for its employees and enlarged its activities in this field in 1938.

The more than a thousand housing associations that were in existence in Poland in 1934 had erected buildings containing a total of 75,000 rooms. One of the largest associations was that at Warsaw which had over 4,000 members, who were almost entirely wage earners and lower-salaried employees. In the 15 years of its existence it had, by 1936, built 24 apartment houses with accommodations for 1,713 families.

Housing associations in Sweden were federated into a national organization, known as the "H. S. B." It operated as a financial center, as purchasing agency, and even as producer of building materials. Local associations carried on actual construction of the buildings, which were then turned over to tenants' associations to run. By 1937, 10 percent of the housing accommodations in Sweden had been constructed by cooperative associations, which had done much to improve building design and equipment and to lower prices.

Cooperative activity in Switzerland was also considerable and had resulted in reducing rent levels somewhat. In five cities cooperatives had built over 10,500 dwellings (including the community, Freidorf, built by the Cooperative Association of Basel for its employees).

In Yugoslavia the large railwaymen's cooperative used its surplus funds to finance the construction of houses for members.

Not to be disregarded as potential aids during the reconstruction period are certain types of associations that functioned in France and Greece for a considerable period after the end of the first World War. In France the associations for the reconstruction of devastated areas at one time numbered nearly 2,300 and had a membership of 162,000 families. Although doing no construction work themselves, they made all the financial and contractual arrangements for repair and construction. It was estimated that they handled about 27 percent of all the repair work and 58 percent of all the construction work carried out in the devastated districts and in some cases the proportion ran as high as 76 percent. The Government of Greece, in order to care for the flood of refugees into Greece from Turkey and southern Russia and for persons involved in the population exchanges with Bulgaria and Turkey, gave housing cooperatives certain privileges,

such as exemption from real-estate taxes and from import duties on building materials. Resettlement cooperatives were also formed, which received land from the Government, obtained by expropriation of large estates. Such associations at the end of 1928 numbered 1,585; they had a membership of 93,000 families and had taken possession of over 1½ million acres of land.

### WORKERS' PRODUCTIVE AND LABOR ASSOCIATIONS

Difficulties of financing, of salesmanship, and of competing with large-scale industry have been among the chief obstacles to the growth of workers' productive associations operating workshops or factories. For these reasons such associations have ordinarily been most successful (1) in the less-industrialized countries or those in which small-scale enterprise has predominated (such as France and U. S. S. R.), (2) in those countries where their sales problem is minimized by virtue of the patronage of a well-organized consumers' cooperative movement which provides a known market (Czechoslovakia and Great Britain) or by preference extended in contracts by a friendly government (Italy, France), and (3) in those industries requiring relatively small capital.

In no country has this branch of the movement attained a predominant place in the whole cooperative movement. Nevertheless, in a few these workers' groups have attained considerable success, and could be a real factor in the work of renewal, both of physical properties and of goods after the war. In 1937, over 2¼ million workers were members of these European industrial cooperatives, and their skills covered a wide range.

TABLE 1.—*Membership and Business of Workers' Productive and Labor Associations, 1937* [1]

| Country | Number of associations reporting | Members | Amount of business (in Swiss gold francs [2]) | Country | Number of associations reporting | Members | Amount of business (in Swiss gold francs [2]) |
|---|---|---|---|---|---|---|---|
| All countries | 9,439 | 2,238,707 | 9,562,792,678 | Italy | 1,568 | 86,500 | 88,550,000 |
| | | | | Netherlands | 17 | (4) | (4) |
| Belgium | 98 | 5,608 | 5,757,000 | Poland | 155 | 5,876 | 9,292,000 |
| Bulgaria [3] | 500 | 124,000 | (4) | Rumania | 95 | 11,152 | (4) |
| Czechoslovakia | 858 | 21,646 | 31,977,000 | Soviet Union | 4,555 | 1,882,350 | 9,248,931,678 |
| Denmark | 36 | (4) | 10,204,000 | Spain | 670 | 32,804 | 2,220,000 |
| Estonia | 16 | 234 | 687,000 | Sweden | 27 | 2,882 | 14,524,000 |
| France [5] | 648 | 31,227 | 46,223,000 | Switzerland | 57 | (4) | (4) |
| Great Britain | 89 | 33,472 | 102,662,000 | Yugoslavia | 36 | 956 | 1,765,000 |
| Hungary | 14 | (4) | (4) | | | | |

[1] Data (except for Bulgaria and Soviet Union) are from Cooperative Societies Throughout the World: Numerical Data (International Labor Office, 1939), pp. 31, 32.
[2] Average exchange rate of Swiss gold franc in 1937=32.7 cents.
[3] Data relate to 1939.
[4] No data.
[5] Not including "commandites" in printing industry.

These workers' organizations are of two general types: Those which have their own workshops and equipment; and the so-called "labor associations" which carry on a contracting business in various lines of work. The workers' productive associations in Belgium were mainly in the printing trade, though there were others scattered through the brewing, construction, and tanning industries, and the

manufacture of glass, cigars, shoes, and enameled ware. Most of the cooperative labor associations of Belgium were those of dock workers. The associations in Czechoslovakia were engaged in various pursuits—in the operation of transport facilities, theaters, and movies, in the printing industry, and in the manufacture of bakery products, meat products, flour, clothing, footwear, stone and glass products, toys, baskets, wooden articles, artificial limbs and paper.

In France the workers' productive associations were engaged in extraction of minerals, stone, etc.; printing; manufacture of textiles, clothing, leather, stone, clay, and glass products, chemicals, paper, and jewelry; metallurgy; woodworking; construction and public works; transportation; and the practice of liberal professions. Perhaps the best known of the workers' productive associations in France—or indeed, in the world—was La Familistère, an iron-foundry association engaged mainly in the production of stoves, at Guise. Nearly destroyed in the first World War, it may also have suffered during the German invasion of northern France in 1940.

The small number of workers' productive associations in Great Britain are for the most part making clothing or footwear or operating printing plants, their chief market in many cases being the consumers' cooperative movement.

Over a sixth of the total number of cooperative associations in Greece in 1936 were classed as workers' productives and labor associations. The latter consisted of associations of porters and stevedores working in the coastal cities. The former were (like most of the German associations of the pre-Nazi period) marketing or supply associations for independent handicraftsmen in various trades—tailoring, shoemaking, baking, etc.

In Hungary the workers' productive associations were found in woodworking, building construction, shoemaking, tailoring, and various home industries. The labor associations were engaged mainly in flood control, irrigation work, and road construction.

Italy presented one of the few outstandingly successful examples of both cooperative workshops and labor cooperatives. The former were found in such industries as printing, mosaic, woodcarving, bridge and ship building, shoemaking, and tailoring; and the latter in longshore work, farming, road construction, building construction, drainage projects, and various other types of public works. Two of the country's railroads were built and operated by worker groups. These associations had had, for many years, preference in Government contracts—a policy which seems to have been continued by the Fascists.

The workers' cooperatives ("artels") in the Soviet Union have been encouraged to the greatest extent by the Government, under the various 5-year plans, and have played a substantial part in industrial production. Even as late as 1938, these industrial cooperatives were producing about 20 percent of the total output of consumer goods in the country. In certain lines the proportion ran considerably higher: Piece goods, 33 percent; furniture and felt footwear, 35 percent; metal goods, 42 percent; metal beds, 65 percent; notions, 80 percent. Certain commodities—embroideries, toys, musical instruments, and kerosene burners—were produced entirely by the artels.

The workers' productive associations in the rural areas of Rumania quarried stone and mined coal; those in the urban areas operated printing plants, tanneries, and textile-weaving mills.

#### OTHER ASSOCIATIONS

The services of certain other special types of cooperatives might be utilized in the work of rebuilding the economy in the devastated regions. Among these may be noted the following: For the communal feeding programs that will be necessary in the period immediately following liberation in each country the experience of the cooperative restaurants in Belgium, Finland, and Sweden, the "canteens" of Denmark, and the "cooperative kitchens" and restaurants in the Netherlands should be of service. Lumber might be obtained from the forestry associations in Bulgaria, Finland, and Rumania; and fish from the fishermen's associations in Great Britain, Greece, Italy, Latvia, Norway, Spain, Sweden, and Yugoslavia. Before the war, cooperatives distributed electric power in Czechoslovakia, Denmark, Estonia, Finland, France, and Yugoslavia (as also in certain still free countries, such as Sweden and Switzerland). In Finland where telephone service was also provided cooperatively, the farmers' cooperative wholesale, "Hankkija," was recognized as the leading enterprise in electrification work and in the installation of telephone equipment. Hungary had cooperatives carrying on a transport business, and one mining association.

The farmers in the various countries also had cooperatives of many types, in addition to the usual processing and marketing of farm products and purchasing of farm supplies. In Belgium the Belgische Boerenbond operated a chain of retail stores and bakeries. In Czechoslovakia the farmers ran flour mills, bakeries, fruit and vegetable canneries, chicory works, and starch factories, as well as associations for the joint leasing and cultivation of land and joint use of farm machinery. Except for the land associations, farmers' cooperatives in France and Switzerland were in similar fields. Dairy associations were of especial importance in the agricultural cooperative movement of Estonia, Finland, Norway, Sweden, and Switzerland. In Denmark, Finland, Netherlands, Norway, and Sweden, practically every phase of agriculture had its marketing and purchasing cooperatives, operating in foreign as well as domestic markets.

Rural cooperatives were even more varied in Bulgaria. That country had in addition to the usual processing, marketing, and supply associations, cooperatives of cocoon growers and forest owners, collective-farming organizations, associations distilling attar of roses, and "river" associations carrying on irrigation, drainage, flood-control, electricity generation and distribution, and extraction of salt from the sea. In Rumania there were land-leasing and cultivation associations, forestry associations, and organizations quarrying stone and mining coal.

### *Consumers' Cooperative Movement*

#### CHARACTERISTICS OF THE MOVEMENT

*Goods and services provided.*—In general, the European distributive associations tended to deal in groceries and household supplies. Extreme variety of type characterized the consumers' cooperatives in countries where organizations usually carried on a limited range of activities and where a new association was formed for each new avenue of activity. In many cases, on the other hand, where the

consumers' cooperatives were of the usual standard types, the retail associations operated in a wide variety of lines. Thus, in France where there still remained many small associations dealing in a single commodity, such as bread, there were also large district associations operating not only grocery stores, bakeries, and restaurants, but even drug stores and department stores. The same is true in Great Britain to an even greater extent; in that country the retail cooperatives also provide services of various kinds, such as medical, dental, and optical care, beauty service, burial, laundering, auto repair, house decoration, and meals.

Finnish and Lithuanian distributive cooperatives usually were of the "general store" type, providing a wide range of commodities in a single shop. Some Finnish stores were reported to carry as many as 5,000 items of merchandise. In Germany and Sweden, on the other hand, the majority of associations tended to concentrate on foodstuffs, although some also sold dry goods, housefurnishings, etc.

*Religious and political aspects.*—Typical of many countries were the cleavages along religious (Belgium, Netherlands, and Spain), political (Belgium, Czechoslovakia, Finland, and Netherlands), and social lines (Hungary). Nationality divisions were also common, especially in eastern Europe where nations had been pieced together, after the first World War, from territories previously under the rule of adjoining countries (Poland, Rumania, Yugoslavia). Such differences did not necessarily mean disharmony. In some countries the various branches were on friendly terms and combined forces on occasion (Czechoslovakia, Hungary). In others (as in Poland), although there were groups of associations whose members were exclusively of a single political or religious belief, they were affiliated with the general national movement. In at least one country (Belgium), however, there was active antagonism among the various factions. One of the noteworthy features of the cooperative movement in Czechoslovakia was the warm friendship between the German and Czechoslovakia branches of the cooperative movement, which continued even after the beginning of the Pan-German movement initiated by the Nazis and until the dismemberment of the country.

Rumania contained a movement organized almost entirely on nationality lines, but compelled by Government decree to belong to a single structure culminating in a State department. Membership in a general federation was also compulsory by law, in Yugoslavia. The Finnish distributive movement was divided into two camps—the cooperatives of urban, progressive, industrial workers, and those of the rural, conservative, agricultural groups. Between them existed no special antagonism; neither does there appear to have been collaboration.

In spite of differences in language, political preference, and religious belief in some countries, the consumers' cooperative movement had in many cases succeeded in becoming unified and well-integrated throughout the entire nation. National federations had been formed, for educational and commercial activities, to which all or a preponderant proportion of the entire movement was affiliated. This was the situation in Austria (before the Anschluss), Bulgaria, Estonia,

France, Great Britain, Hungary, Lithuania, Poland, Switzerland, the Scandinavian countries, and Yugoslavia. In most of these the national federation pursued a policy of religious and political neutrality. This latter did not, however, preclude action by the movement to protect itself against legislative attack; political "neutrality" meant that the movement did not identify itself with any existing political party.[4]

*Cooperative movement in relation to the State.*—In its attitude to and relations with the Government, the consumers' cooperative movement, just prior to the present war, varied from (1) uncompromising self-reliance (as in Great Britain, Netherlands, Norway, Sweden, and Switzerland) through (2) participation with the Government, on equal terms, in various enterprises which were generally undertaken as expedients for improving the general economic situation (pre-Anschluss Austria, Hungary, Latvia, Lithuania) (3), through varying degrees of government assistance (usually credit, in the form of long-term loans,[5] as in France), to (4) extreme dependence on Governments which were continually intervening in the affairs of the movement (Bulgaria, Rumania).

The attitude of the Governments, on their part, ranged from—

(1) Open hostility (National-Socialist Austria, Germany), through—

(2) Apparent indifference or a hands-off policy (Belgium, Great Britain, Netherlands, Switzerland) to—

(3) Active interest manifested through—

(*a*) Strict control (Latvia, Lithuania).

(*b*) Granting of monopolies in certain lines to cooperatives (Estonia, Latvia).

(*c*) Extension of credit or outright subsidies (France, Rumania).

(*d*) Special Government offices to regulate, direct, or promote cooperative activities (Czechoslovakia, Estonia, France, Rumania).

(*e*) Establishment of cooperative training schools (Bulgaria, Rumania) or introduction of cooperative courses in the schools or colleges (France, Poland, Rumania).

(*f*) Public expressions of appreciation on the part of Government officials (Czechoslovakia, Hungary, Sweden).

(*g*) Extension to cooperatives of representation on various Government regulatory or administrative bodies (Bulgaria, Czechoslovakia, France. Hungary, Lithuania).

Since the Bolshevik Revolution in Russia, the attitude of the authorities there has ranged from (1) extreme favor that gave the movement the status of a Government enterprise, membership in which was made compulsory (1919–23), (2) restoration of voluntary membership (1924) but with operation under Communist control, to (3) absorption of urban cooperatives into the State store system (1935), but encouragement of the rural consumers' cooperatives and other forms of cooperative effort (1935–44).

[4] In Great Britain the movement has its own political entity, The Cooperative Party.

[5] It should be pointed out that in most countries where this was the situation, similar credit was also accorded to other forms of business enterprise—and often on a much wider and more liberal scale. Among the branches of the cooperative movement, also, it was generally the credit and agricultural associations (rather than the consumers' cooperatives) that were accorded Government credit.

## *Consumers' Cooperative Movement During and Immediately After the Depression*

The impact of the depression and post-depression years was felt by European cooperatives in several ways: In the decreased volume of trade caused by the diminished purchasing power of the members, who were largely industrial workers or agriculturalists; in the increased attacks by private business, resulting in efforts to prevent further expansion of cooperatives and to restrict their activities through either general legislation or measures aimed solely at cooperatives; and in the hampering effects of measures adopted by the Governments in their effort to adjust to worldwide conditions of commerce and trade. The trend toward curbs upon the cooperative movement was intensified as the corporative type of government began to be introduced in one country after another, under the influences of a complicated set of domestic and world events and factors.

### DEPRESSION EFFECTS UPON TRADE AND MEMBERSHIP

Cooperatives came through the depression fairly well. In general they were able to resist depression conditions in proportion to their financial resources and the degree of coordination of the various parts of the movement. Those countries the economy of which was largely dependent upon foreign trade were among the first to suffer, the shock being quickly communicated to industry or agriculture or both, depending upon the type of the country's exports and imports.

The Belgian cooperative movement, although it had not regained its predepression level, had undergone a drastic structural reorganization and integration designed to put it on a much firmer basis financially. By this action the consumers' cooperative movement of Belgium had become (with the possible exception of Rumania [6]) the most strongly centralized of all Europe. Rapid progress had already begun under the new plan, when the present war broke out.

The consumers' cooperative movement in France had through many years' consolidation of associations, attained a stability that enabled it to hold its own remarkably well during the early years of the depression. Beginning in 1933, however, it suffered a severe blow with the sudden failure of the Cooperative Bank, whose obligations were thereupon assumed by the cooperative movement. As a result of all this and the other economic effects of depression a general reorganization of the whole consumers' network was voted, providing for greater mutual assistance and bestowing added authority on the central organizations.

In the Netherlands, although the depression was severe and was greatly felt by the working-class membership, one organization was formed to give technical aid to associations in difficulties and another to lend financial assistance. Sales of local associations declined year by year throughout the depression, until 1936, when a sharply upward trend began. Such was the loyalty of the local associations, however, that the sales of the wholesale rose without a break throughout the entire depression period.

[6] In Rumania, however, the centralization was forced by the Government, not voted by the cooperators themselves.

The Norwegian consumers' cooperative movement not only held its own throughout this period but advanced, each year showing higher trade levels.

Polish cooperatives had recovered from the depression by 1933 and consumers' and agricultural cooperatives were making rapid progress.

In Czechoslovakia where depression conditions (especially in the Sudeten area, where the German branch of the movement was concentrated) continued through 1936, both the German and Czechoslovakian branches of the movement had overcome the effects of the depression and were well on the upgrade by the end of 1935.

In Sweden where there was a systematic policy of amalgamation of small associations into larger and more stable organizations and where ailing associations were taken in hand and set on their feet, the cooperative movement came through the depression without serious mishap. The sales of both the retail and the wholesale associations rose uninterruptedly during the whole depression period. The associations in Switzerland were almost as fortunate, sustaining only slight reductions about 1932 and 1933.

In the Baltic countries the trend toward the corporative State came early, dating in Lithuania from 1926, when a single-party dictatorship came into power. Similar systems followed in Estonia in 1933 and Latvia in 1934. With these changes came complete government control over the cooperatives, which had been severely affected by the depression (in Estonia by 1934 the number of associations and membership had dropped to an all-time low and many of the associations were saved only through timely assistance from the cooperative wholesale). Along with control also came favors; cooperatives were in some cases given export monopolies (Estonia, Latvia) and allowed to participate in many ways in the Government's system of economic control. In Latvia, however, this entailed a complete reorganization forced by the Government and conformity to the new ideology.

Somewhat similar circumstances were found in most of the countries that later threw in their lot with Germany, and cooperatives were of course affected by the measures adopted by the New Order. In Italy the cooperatives had been incorporated into the Fascist system soon after the rise of Mussolini.

The depression was unusually severe in Austria, but the cooperatives withstood the situation during the first few years better than did private business, although volume of business receded. After the crisis of 1933 and the beginning of the authoritarian system cooperatives felt more and more the iron hand of the authorities, losing the Labor Bank and being themselves placed under Government administrators and obliged to become members of corporative organizations created by the Government for the various branches of trade and industry. This crisis was surmounted and Government administration was withdrawn in 1935, after which the movement (retail and wholesale) began to advance again. This progress was terminated abruptly with the German invasion in 1938. From that time onward the only question was, how long the movement could delay the ultimate aim of the Nazis—dissolution.

Unlike the situation in most other countries, the depression in Germany had not been preceded by a period of prosperity, but was the culmination of a long downhill slide in business and employment that had begun in 1923. During this time cooperatives had been singled out for special taxation in many German States and municipalities, which seriously reduced their earning power and the benefits they could return to their worker members. When Government credit was made available for business, cooperatives were again victims of discrimination. In 1933 Hitler came to power. During the succeeding years workers' labor cooperatives disappeared entirely and in the other branches of the cooperative movement drastic amalgamations were forced. The consumers' associations were especially singled out, the largest associations being attacked first and the wholesales merged into an association that did not even contain the word cooperative. During the next few years, however, the attitude not only of State governments but also of the Central Government showed extreme variation. Agricultural cooperatives, alone, were consistently encouraged.

Although drastic reorganizations in the cooperative movement were carried out by Government order in Hungary and Rumania, some degree of friendliness was also shown. In Hungary, the importance of "Hangya," the national consumer-farmer cooperative wholesale, was recognized; it was given representation on all the State-controlled syndicates, and its facilities were utilized in many ways.

In Bulgaria, where the constitutional government was overthrown early in 1934, the Government began to intervene more and more in cooperative affairs. Nevertheless, all branches of the movement expanded up to the outbreak of war, and cooperators were even given responsible posts in the Government.

## *Consumers' Cooperation Just Before World War II*

### RETAIL CONSUMERS' COOPERATIVES

In 1937 the 24 countries for which data are shown in table 2 had a total of 21,325 consumers' cooperatives, with an aggregate membership of 19,313,878 persons. Of these, countries occupied by the Axis in the present war accounted for 7,011 associations and 4,454,255 members; free and neutral countries, for 4,197 associations and 10,301,690 members; and Axis and satellite countries, for 10,117 associations and 4,557,933 members.

TABLE 2.—*Membership and Business of Retail Consumers' Cooperatives, by Country*

| Country | Year | Number of associations reporting | Number of members | Business done | |
|---|---|---|---|---|---|
| | | | | Monetary unit | Amount |
| Austria | 1937 | 220 | 300,000 | Schilling | 124,608,700 |
| | 1936 | 131 | 260,831 | do | 118,063,603 |
| | 1935 | 101 | 264,464 | do | 115,200,000 |
| Belgium | 1937-38 | 40 | [1] 305,197 | Franc | 663,073,337 |
| | 1937 | [2] 43 | 500,000 | do | 650,000,000 |
| | 1935 | 43 | 346,568 | do | 728,709,299 |
| Bulgaria | 1941 | 155 | 104,992 | Lev | [3] 656,400,000 |
| | 1937 | 62 | 75,000 | do | 556,800,000 |
| | 1935 | 61 | 69,000 | do | 459,020,700 |
| Czechoslovakia | 1937 | 816 | 805,544 | Franc | 203,798,000 |
| | 1936 | 816 | 644,400 | Koruna | 1,348,400,000 |
| | 1935 | 835 | 642,700 | do | 1,299,100,000 |
| Denmark | 1941 | 1,933 | 419,200 | Krone | [4] 361,500,000 |
| | 1937 | 1,882 | 366,100 | do | 328,700,000 |
| | 1935 | 1,835 | 319,000 | do | 286,003,800 |
| Estonia | 1940 | 208 | ([5]) | Kroon | 50,000,000 |
| | 1937 | 192 | 47,000 | do | 45,500,000 |
| | 1935 | 173 | 35,478 | do | 26,332,000 |
| Finland | 1941 | 529 | 676,000 | Markka | [6] 7,695,000,000 |
| | 1937 | 537 | 562,298 | do | 4,683,077,605 |
| | 1935 | 528 | 517,355 | do | 3,327,000,000 |
| France | 1957 | 1,235 | 1,800,000 | Franc | 1,781,409,000 |
| | 1936 | 1,200 | 1,600,000 | do | 1,471,772,000 |
| | 1935 | 1,064 | 1,698,359 | do | 2,232,540,000 |
| Germany | 1937 | 1,162 | 2,010,900 | Reichsmark | 532,069,098 |
| | 1936 | 1,162 | 2,094,500 | do | 510,000,000 |
| | 1935 | 1,169 | 3,121,839 | do | 659,600,000 |
| Great Britain | 1943 | [6] 1,058 | 9,000,000 | Pound | 330,000,000 |
| | 1937 | 1,094 | 8,084,990 | do | 251,393,047 |
| | 1935 | 1,098 | 7,414,376 | do | 220,429,517 |
| Hungary | 1940 | [7] 2,094 | [6] 701,417 | Pengö | [2] 91,306,160 |
| | 1936 | 1,480 | 630,000 | do | 91,306,160 |
| | 1935 | 1,489 | 627,693 | do | 81,148,481 |
| Iceland | 1942 | [8] 48 | 20,189 | Krone | 109,000,000 |
| | 1936 | 37 | 9,150 | do | 19,200,000 |
| | 1935 | 37 | 8,680 | do | 17,200,000 |
| Irish Free State | 1941 | 20 | 15,771 | Pound | 2,474,239 |
| | 1936 | 21 | 9,222 | do | 186,537 |
| | 1935 | 22 | 9,335 | do | 180,876 |
| Italy | 1938 | 3,865 | 825,000 | Lira | [9] 1,300,000,000 |
| | 1935 | 3,465 | 775,000 | do | 1,180,000,000 |
| Latvia | 1938 | 184 | 27,577 | Lat | 58,900,000 |
| | 1935 | 112 | 18,008 | do | 13,523,000 |
| Lithuania | 1939 | 185 | 25,189 | Lit | 114,285,259 |
| | 1935 | 165 | 21,332 | do | 33,191,364 |
| Netherlands | 1939 | 351 | 304,804 | Florin | 70,769,000 |
| | 1936 | 419 | 325,368 | do | 63,735,779 |
| | 1935 | 398 | 320,907 | do | 64,775,816 |
| Norway | 1942 | 673 | 200,490 | Krone | [6] 210,020,700 |
| | 1937 | 585 | 160,107 | do | 168,253,500 |
| | 1935 | 524 | 138,557 | do | 129,769,600 |
| Poland | 1939 | 1,776 | 412,762 | Zloty | ([5]) |
| | 1937 | 1,500 | 325,000 | do | 143,200,000 |
| | 1935 | 1,391 | 311,000 | do | 131,700,000 |
| Rumania | 1938 | 2,791 | 154,735 | Leu | ([5]) |
| | 1934 | 1,767 | 257,907 | do | 1,259,130,054 |
| Spain | 1937 | 1,803 | 1,178,817 | Franc | 13,638,000 |
| | 1934 | 272 | 79,814 | Peseta | 90,863,000 |
| Sweden | 1942 | 676 | 765,700 | Krona | 731,000,000 |
| | 1937 | 702 | 605,796 | do | 488,740,957 |
| | 1935 | 725 | 568,161 | do | 412,177,962 |
| Switzerland | 1942 | 546 | 461,000 | Franc | 406,100,000 |
| | 1937 | 540 | 413,715 | do | 299,251,995 |
| | 1935 | 535 | 402,339 | do | 274,200,381 |
| Yugoslavia | 1939 | [9] 138 | 90,672 | Dinar | 283,887 |
| | 1935 | 97 | 72,327 | do | 206,311 |

[1] 46,000 nonpurchasing members were dropped from rolls in this year.
[2] Data relate to 1936.
[3] Data relate to 1939; affiliates of central organizations only.
[4] Data relate to 1939.
[5] No data.
[6] Data relate to 1942.
[7] Includes agricultural supply associations.
[8] Data relate to 1941.
[9] Data relate to 1937.

### WHOLESALE COOPERATIVES

In all of the countries of Europe, except Greece and Portugal, the retail cooperatives had combined to establish wholesales through which to obtain supplies of goods. The operations of these wholesales in selected years (depression, pre-war, and war) are shown in table 3.

TABLE 3.—*Membership and Business of Cooperative Wholesales, by Country*

| Country and wholesale | Year | Number of affiliated associations | Currency | Wholesale | |
|---|---|---|---|---|---|
| | | | | Amount of business | Own production |
| Austria: GöC | 1937 | 131 | Schilling | 81, 700, 000 | (1) |
| | 1936 | 131 | do | 73, 616, 832 | [2] 29, 718, 000 |
| | 1933 | 143 | do | 76. 249, 019 | 4, 841, 000 |
| Belgium: S. G. C | 1940 | [3] 62 | Franc | 138, 737, 000 | (1) |
| | 1937 | 43 | do | 169, 000, 000 | 27, 000, 000 |
| | 1933 | 71 | do | 186, 655, 531 | 28, 095, 091 |
| Bulgaria: Napred | 1942 | 78 | Lev | 1, 140, 000, 000 | (1) |
| | 1940 | 69 | do | 608, 167, 000 | [4] 117, 433, 908 |
| | 1933 | 58 | do | 432, 297, 514 | 37, 000, 000 |
| Czechoslovakia: | | | | | |
| G. E. C | 1937 | 140 | Koruna | 320, 954, 014 | (1) |
| | 1935–36 | [5] 160 | do | 295, 938, 000 | 57, 268, 000 |
| | 1933 | 166 | do | 292, 165, 370 | 53, 005, 470 |
| V. D. P | 1940 | [6] 301 | do | 638, 500, 000 | [6] 172, 421, 000 |
| | 1933 | 331 | do | 455, 549, 000 | 136, 974, 659 |
| Sdruzeni | 1937 | 131 | do | 203, 240, 000 | (1) |
| Denmark: F. D. B | 1939 | 1, 870 | Krone | 216, 200, 000 | 65, 100, 000 |
| | 1937 | 1, 900 | do | 206, 841. 653 | 60, 597, 866 |
| | 1933 | 1, 833 | do | 151, 900, 000 | 42, 900, 000 |
| Estonia: E. T. K | 1942 | [7] 208 | Reichmark | 41, 400, 000 | 8, 000, 000 |
| | 1937 | 192 | do | 29, 107. 000 | 6, 208, 000 |
| | 1933 | 184 | do | 12, 687. 000 | [8] 3, 100, 000 |
| Finland: | | | | | |
| O. T. K | 1942 | (1) | Markka | 1, 612, 000, 000 | 239, 600, 000 |
| | 1939 | 127 | do | 1, 257, 000, 000 | 243, 200, 000 |
| | 1933 | 109 | do | 604, 970, 281 | 82, 035, 578 |
| S. O. K | 1943 | (1) | do | 2, 153, 000, 000 | 450, 000, 000 |
| | 1939 | [9] 417 | do | 1, 646, 000, 000 | 356, 000, 000 |
| | 1933 | 418 | do | 914, 571, 571 | 183, 585, 602 |
| France | 1939 | (1) | Franc | 1, 276, 899, 000 | 81, 200, 085 |
| | 1937 | 1, 235 | do | 1, 066, 021, 394 | 62. 441, 343 |
| | 1933 | 1, 120 | do | 893, 878, 615 | 50, 300, 203 |
| Germany: G. E. G | 1937 | 1, 162 | Reichsmark | 330, 009, 321 | 120, 608, 663 |
| | 1936 | 1, 169 | do | 309, 999, 304 | 107, 581, 300 |
| | 1933 | 1, 154 | do | 279, 940, 844 | 108, 000, 000 |
| Great Britain: | | | | | |
| English Wholesale | 1943 | (1) | Pound | 7, 544. 315 | (1) |
| | 1942 | [9] 1, 008 | do | 157, 395, 338 | 47, 406, 227 |
| | 1939 | 1, 009 | do | 123, 015, 316 | 44. 243, 934 |
| | 1933 | 1, 052 | do | 93, 031, 390 | 30, 049, 108 |
| Scottish Wholesale | 1943 | (1) | do | 35. 778. 000 | (1) |
| | 1942 | [9] 221 | do | 34, 044, 052 | [9] 9, 516, 972 |
| | 1939 | 227 | do | 24, 612, 711 | 7, 132, 330 |
| | 1933 | 241 | do | 16, 016, 361 | 5, 361, 466 |
| English and Scottish Joint Wholesale. | 1942 | 2 | do | 9, 429. 000 | ---------- |
| | 1939 | 2 | do | 8, 400. 000 | ---------- |
| | 1933 | 2 | do | 15, 975, 552 | ---------- |
| Hungary: Hangya | 1941 | [10] 1, 887 | Pengö | 230. 000, 000 | 28, 600, 000 |
| | 1937 | 1, 480 | do | 80, 053, 757 | 4, 783, 085 |
| | 1933 | 1, 541 | do | 43, 230, 547 | 3, 828, 120 |
| Iceland: Union and Wholesale | 1942 | [9] 48 | Krone | 69, 000, 000 | [11] 9, 000, 000 |
| | 1936 | 40 | do | 8, 500. 000 | 1, 588, 199 |
| Ireland: I. A. W | 1942 | 360 | Pound | 721, 806 | ---------- |
| | 1937 | 373 | do | 241 974 | ---------- |
| Italy: E. I. C. A | 1937 | (1) | Lira | 115, 567, 000 | (1) |
| | 1932 | 251 | do | 115, 526, 994 | (1) |
| Latvia: | | | | | |
| Turiba | 1938 | [12] 414 | Lat | [12] 80. 000. 000 | (1) |
| Konzums | 1935 | 223 | do | 1, 350. 000 | (1) |
| Lithuania: Lietukis | 1939 | 145 | Lit | 138, 911. 000 | (1) |
| | 1936 | 108 | do | 73, 710. 000 | (1) |
| Luxemburg: General Federation | 1937 | (1) | Franc | 28, 716. 000 | (1) |
| Netherlands: Handelskamer | 1940 | [9] 292 | Florin | 27, 792. 000 | [9] 3, 434. 000 |
| | 1937 | 302 | do | 28, 118. 700 | 3, 158. 320 |
| | 1933 | 284 | do | 21, 431. 000 | 1, 434. 000 |
| Norway: N. K. L | 1941 | 666 | Krone | 53, 162. 000 | [7] 24, 400. 000 |
| | 1937 | 585 | do | 54, 105. 407 | 24, 000. 000 |
| | 1933 | 483 | do | 33, 135, 651 | 15, 359, 000 |

See footnotes at end of table.

TABLE 3.—*Membership and Business of Cooperative Wholesales, by Country*—Con.

| Country and wholesale | Year | Number of affiliated associations | Currency | Wholesale | |
|---|---|---|---|---|---|
| | | | | Amount of business | Own production |
| Poland: Spolem | 1939 | 1,776 | Zloty | 98,000,000 | (1) |
| | 1938 | 1,800 | do | 100,000,000 | 10,000,000 |
| Rumania: Hangya | 1933 | 794 | do | 69,616,646 | 5,130,937 |
| | 1937 | 325 | Leu | 121,000,000 | (1) |
| Soviet Union: Centrosoyus | 1935 | 315 | do | 2,647,589 | 590,469 |
| | 1934 | (1) | Ruble | 14,910,000,000 | (1) |
| Spain: C. C. A | 1933 | (1) | do | 14,154,400,000 | (1) |
| Sweden: K. F | 1937 | 1,200 | Peseta | 4,525,000 | (1) |
| | 1941 | 706 | Krona | 270,930,000 | [10] 149,700,000 |
| | 1939 | 693 | do | 269,350,000 | 144,535,346 |
| Switzerland: Konkordia | 1933 | 763 | do | 152,483,000 | 81,759,000 |
| | 1939–40 | (1) | Franc | 3,816,000 | (1) |
| | 1937 | 47 | do | 3,340,000 | (1) |
| V. O. L. G | 1933 | [13] 52 | do | 3,533,922 | (1) |
| | 1938 | 329 | do | 43,000,000 | 1,500,000 |
| V. S. K | 1936 | 318 | do | 37,710,000 | (1) |
| | 1933 | 310 | do | 39,822,864 | (1) |
| | 1942 | 546 | do | 263,690,000 | (1) |
| | 1939 | 545 | do | 227,869,001 | 5,280,152 |
| | 1933 | 533 | do | 168,585,443 | 1,886,338 |
| Yugoslavia | 1937 | 1,236 | Dinar | 57,846,000 | (1) |
| | 1935 | 991 | do | 37,166,955 | (1) |

[1] No data.
[2] Data relate to 1935.
[3] Data relate to 1938.
[4] Data relate to 1936.
[5] Data relate to 1934–35.
[6] Data relate to 1937.
[7] Data relate to 1939.
[8] Data relate to 1934.
[9] Data relate to 1941.
[10] Data relate to 1940.
[11] Estimated.
[12] Includes agricultural.
[13] Data relate to 1932.

## *Place of Cooperatives in the National Economy*

### IMPORTANCE IN TERMS OF POPULATION

Before the outbreak of World War II, the members of the consumers' cooperatives accounted for 10 percent or more of the population in Denmark, Finland, the British Isles, Soviet Union, and Sweden. In the Soviet Union, where the urban cooperatives had been absorbed into the system of State-owned stores in 1935, the membership of the rural consumers' cooperatives included nearly a third of the rural population (table 4). Allowing for the families of cooperators, the percent of population served by the consumers' cooperatives ranged from 15.0 percent (Netherlands) to 34.0 percent (Sweden).

TABLE 4.—*Importance of Consumers' Cooperatives in Relation to Population, Just Prior to Outbreak of War*

| Country | Cooperators as percent of population | Country | Cooperators as percent of population |
|---|---|---|---|
| *Consumers' cooperatives* | | *Consumers' cooperatives*—Con. | |
| Based on members only: | | Including families also—Con. | |
| Denmark | 10.0 | Hungary | [1] 25.0 |
| Finland | 16.6 | Netherlands | 15.0 |
| Germany | 6.0 | Norway | 27.0 |
| British Isles | 18.1 | Sweden | 34.0 |
| Latvia | 1.4 | Switzerland | 25.0 |
| Lithuania | .9 | *All types of associations* | |
| Luxemburg | 6.5 | Based on members only: | |
| Netherlands | 3.5 | Bulgaria | 15.6 |
| Norway | [1] 6.7 | Norway | 20.0 |
| Rumania | .8 | Rumania | 7.3 |
| Soviet Union | [2] 32.1 | Including families also: | |
| Spain | 4.7 | Estonia | 50.0 |
| Sweden | 12.0 | Finland | 50.0 |
| Yugoslavia | 1.6 | Greece | 20.0 |
| Including families also: | | Hungary | 45.0 |
| Belgium | 25.0 | Poland | 40.0 |
| Czechoslovakia | 30.0 | Rumania | 33.3 |
| Denmark | 33.3 | Yugoslavia | 40.0 |
| Germany | 24.0 | | |

[1] Includes only associations affiliated to central organizations.
[2] Based on rural population; no consumers' cooperatives in urban areas.

### IMPORTANCE IN TERMS OF TRADE

Outstanding among the countries, as regards the proportion of total retail trade done by cooperatives, were Bulgaria (25.0 percent), Estonia (24.0 percent), and Finland (30.0–40.0 percent). As the statement below indicates, the proportion of cooperative trade ranges relatively high as regards specified commodities or lines of trade. Perhaps the most striking instance is Lithuania, where the supply or trading associations handled from 59.5 to 84.4 percent of the total in various commodities just before the war.

In five countries (pre-Anschluss Austria, Bulgaria, Estonia, Hungary, Poland ("Spolem")) the central business organization of the consumers' cooperative movement was the most important commercial enterprise in the country. In Sweden, the cooperative network was reported as being "the only large-scale organization in the distributive trade."

| | *Cooperative business as percent of retail trade* |
|---|---|
| Belgium: Total retail trade | 10.0 |
| Bulgaria: Total retail trade | 25.0 |
| Czechoslovakia: Total retail trade | 3.8 |
| Denmark: Total retail trade | 17.0 |
| Estonia: Total retail trade | 24.0 |
| Finland: Total retail trade | 30.0–40.0 |
| France: Groceries | 6.0 |
| Germany: Total retail trade: | |
| 1931 | 5.0 |
| 1935 | 2.0 |
| Great Britain: [1] | |
| Food and tobacco | 12.0 |
| Meat | 14.5 |
| Coal | 20.0 |
| Sugar and preserves | 27.0 |
| Hungary: Total retail trade | 12.5 |
| Latvia: Food | 16.0 |
| Lithuania: | |
| Cement | 59.5 |
| Salt | 76.0 |
| Agricultural machinery | 80.0 |
| Sugar | 84.4 |
| Netherlands: Groceries | 6.0 |
| Poland: | |
| Total retail trade | 3.0 |
| Food | 10.0 |
| Sweden: | |
| Total retail trade | 12.0 |
| Food | 20.0 |
| Switzerland: | |
| Total retail trade | 10.0–12.0 |
| Sugar, macaroni | 80.0 |

[1] Data relate to 1942.

### IMPORTANCE IN TERMS OF PRODUCTION

Cooperatives had made considerable progress in producing their own supplies—both in variety of product and in volume of goods produced. In most cases the major part of the production was carried on by the cooperative wholesales, either in their own departments or through separate subsidiary organizations. The local cooperatives generally produced a small amount also, mostly perishable goods like meat products and bakery goods.

Table 5 shows for the latest year for which production figures are available the value of goods produced and their relative importance in terms of wholesale business. Only in the case of Sweden did the wholesale's production account (in value) for as much as half of its total sales.

TABLE 5.—*Value of Own Production of Cooperative Wholesales, by Country*

| Country | Year | Goods produced | | | Country | Year | Goods produced | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Monetary unit | Value | Percent of total sales | | | Monetary unit | Value | Percent of total sales |
| Austria | 1935 | Schilling | 29,718,000 | 42.8 | Great Britain | 1939 | Pound | [1] 51,376,254 | 34.3 |
| Bulgaria | 1936 | Lev | 117,433,998 | 22.1 | Hungary | 1939 | Pengö | 11,352,734 | 8.9 |
| Czechoslovakia | 1936 | Koruna | [1] 255,991,550 | 31.0 | Iceland | 1939 | Krone | 4,257,000 | 15.2 |
| Denmark | 1937 | Krone | 60,597,998 | 29.3 | Netherlands | 1938 | Florin | 3,424,000 | 12.3 |
| Estonia | 1939 | Kroon | 8,800,000 | 24.2 | Norway | 1939 | Krone | 24,400,000 | 39.0 |
| Finland | 1939 | Markka | [1] 599,300,000 | 20.6 | Poland | 1938 | Zloty | 10,000,000 | 10.0 |
| France | 1939 | Franc | 81,200,085 | 6.4 | Rumania | 1935 | Lev | 590,469 | 22.3 |
| Germany | 1931 | Reichsmark | [1] 155,326,693 | 31.1 | Sweden | 1939 | Krona | 144,535,346 | 53.7 |

[1] Two organizations.

In many countries the wholesales undertook production as part of a definite aim toward cooperative self-sufficiency. This was the case in Bulgaria, Czechoslovakia, France, Germany, and Great Britain. In other countries the consumers' cooperatives entered production only when they were unable to obtain goods of satisfactory quality or at a satisfactory price. Outstanding in this class were Denmark, Sweden, and Switzerland. The policy of this latter group resulted in some spectacular struggles with cartels and other concentrated private industry, but the entrance of the cooperative wholesale into manufacture resulted in drastic price reductions—in Denmark in the prices of rolled oats and twine, in Sweden in the prices of margarine, electric-light bulbs, flour, commercial fertilizer, and rubber footwear, and in Switzerland in the prices of flour, shoes, meat, and chocolate.[7] So effective was the Swedish wholesale that eventually it won price reductions merely by a threat to enter production of certain commodities. In Austria the wholesale's entry into production was occasioned by the desperate situation at the end of the first World War. In several fields the wholesale participated with other agencies (the Austrian Government, municipalities, trade-unions, etc.) in enterprises to produce needed goods. Some of these enterprises were liquidated during the post-war depression, others were continued by the wholesale.

The Czech cooperative wholesale, V. D. P., in 1937 was the largest flour-mill operator in the country. The German wholesale in Czechoslovakia produced more canned goods (fish, fruits, vegetables) than its affiliated associations could use; and it exported the surplus to Sweden, Finland, and Germany.

### IMPORTANCE IN TERMS OF IMPORTS AND EXPORTS

The Austrian wholesale, GöC, had built up an extensive export and import trade with Russia, through an organization in which (at the Russian end) the Russian Government participated. In Bulgaria, "Napred" was also an important importer and exporter, and was the

[7] In the case of chocolate, price reductions were obtained by a concerted boycott of the cartel's products by cooperative associations.

sales outlet for the salt produced by the agricultural cooperative syndicate. The Estonian wholesale, E. T. K., accounted for 10 percent of Estonia's imports, but in individual commodities its business ran up much higher; 30 percent of the rice, 40 percent of the sugar and petroleum, 50 percent of the agricultural machinery, and 80 percent of the fertilizer brought into the country were imported by this cooperative organization. Until 1937 it was also an important exporter, handling 13.5 percent of the butter exported, 23.0 percent of the eggs, and some fish, fruit, and potatoes, but this export business came to an abrupt end in that year, when the Government took over all export business.

Although the French wholesale, M. D. G., carried on an exporting and importing business with cooperatives in Belgium, Czechoslovakia, Great Britain, Italy, Poland, Soviet Union, and Switzerland, this had been cut considerably even before the war by the increasing restrictions on international trade in the thirties. Before the rise of National Socialism in Germany, the consumers' cooperative wholesale there, G. E. G., was a large importer of goods, mostly bought from cooperative sources. In 1931 it imported goods valued at 11,200,000 reichsmarks, from 22 European and Asiatic countries.

The wholesales of England and Scotland had purchasing agents in various places throughout the world and carried on a very large business of import and export through them.

The export business of the Hungarian cooperative wholesale, "Hangya," was started after the end of the first World War, as a joint enterprise in which the Government was the other partner. Its company, Futura, became the channel for the collection and export of agricultural products raised throughout Hungary, as well as for the distribution of State-controlled goods. Futura's operations took it into Austria, Czechoslovakia, Italy, Poland, and Switzerland.

In Lithuania the wholesale, Lietukis, in 1939 was the only exporter of (and largest dealer in) cereals in Lithuania and handled some 45 percent of the total national flax exports. The Icelandic wholesale handled over 25 percent of Iceland's imports and 90 percent of the meat, 80 percent of the wool and 80–90 percent of the agricultural products exported. It had branch offices in Copenhagen, Leith (Scotland), and New York City.

The exporting and importing business of the Danish, Finnish, Norwegian, and Swedish cooperatives was carried on through a joint organization, the Scandinavian Cooperative Wholesale (*Nordisk Andelsförbund*). In addition, the Swedish cooperative wholesale, K. F., helped to organize an association for the export sale of Swedish handicraft goods; this association, "Products from Sweden," began business in 1935.

V. S. K. in Switzerland had, by 1939, become the largest importer of the goods it handled.

## *Cooperatives in World War II*

### SITUATION IN OCCUPIED COUNTRIES

In the early stages of the war the consumers' cooperative movement suffered the greatest physical destruction in Czechoslovakia, Poland, and Yugoslavia. To some extent this was the result of dismemberment of the country; the characteristic Nazi hostility toward consumers' cooperatives accounted for the rest. In Czechoslovakia, cooperators (especially those of German descent) had for nearly 3 years been subjected to a steadily mounting campaign of intimidation and vilification by the Nazi sympathizers in the country and finally had seen the movement split up into several pieces as the Government was forced to cede territory to Germany, Poland, and Hungary. The plant and business (factories and all) of the German branch of the movement were destroyed. The Czechoslovak structure was drastically telescoped and consolidated, and some of the facilities were turned over to private traders. In 1942, four federations were created by decree, in the so-called Protectorate (Moravia and Silesia)—for agriculture, consumers', housing, and other associations, respectively—and two auditing unions; all were placed under the control of four Government departments. All of the members' rights and authority is exercised by "trustees," appointed by the Nazis.

In the primary stage of the war, when Polish territory was divided between Russia and Germany, the Russians dissolved all the Polish urban associations in their area but left the agricultural cooperatives. The associations in territory incorporated into the Reich were dissolved. In other German-occupied areas, cooperatives of all types were at first tolerated, later even fostered, because they were useful.

In Yugoslavia part of the movement was lost in the partitioning of the country. In Slovenia the cooperative property and savings deposits were seized by the Germans and Italians. In Serbia, after an initial period of destruction and nazification, the potential value of the cooperative network apparently led not only to toleration by the puppet government but expansion by it. A proposed reorganization by the Government, reported in 1943, contemplated a considerable expansion of associations and functions, one of which was the establishment of a health cooperative in every community with over 4,000 inhabitants. The Nedic Government reported that these suggestions had been voted upon favorably by the associations.

During the period of Russian occupation, the cooperatives of the Baltic States suffered first by losses of property and supplies, then by incorporation into the Russian cooperative system. Later, under the Germans, all three countries were combined into the new Ostland Province, the cooperatives being allowed to continue under strict Nazi control. In the initial period after the German invasion a cooperative paper mill in Estonia and an unspecified productive plant in Lithuania were confiscated and turned over to German businessmen.

In western Europe, a much milder policy was followed by the Germans from the start. Although under strict control, the actual operation of the cooperatives does not appear to have been greatly interfered with in Belgium, Denmark, and the Netherlands, at least up to the time of the launching of the Allies' invasion campaign of

liberation. In Norway the initial lenient period was followed by confiscation of the wholesale's plant and goods, after the officials resisted undercover attempts at Nazi domination; the retail associations are still in operation. By far the largest part of the French consumers' cooperative movement was in the northern (occupied) section of the country. When France was invaded the Germans destroyed the cooperatives in Alsace-Lorraine and incorporated their business into the German Labor Front. Late (1943) reports indicate that elsewhere in occupied France, after the initial period of destruction, and in Vichy France the associations were allowed to continue operations. The volume of wholesale cooperative business fell off drastically in 1940 and 1941, but recovered to a considerable extent in 1942, and the number of affiliated associations even increased.

### SITUATION IN ALLIED OR NEUTRAL TERRITORIES

In most of the Allied and neutral countries the cooperatives are operating as before the war, though affected like all business by wartime shortages of goods and manpower and by rationing and other regulations. In practically all, membership has expanded and, generally, volume of business as well. The Swedish wholesale has even expanded its productive facilities and is entering new fields.

The cooperatives—rural consumer's, workers' productive, and agricultural—in the Soviet Union are being utilized in the economy of that country to a greater extent than at any time in the past decade.

In Spain where the cooperative movement was in disfavor with the Franco Government because of its services to the Loyalists, a new law was enacted in 1942, incorporating the movement into the totalitarian State.

### SITUATION IN AXIS COUNTRIES

By the time of the outbreak of war, in September 1939, the German consumers' cooperative movement was well on its way to dissolution. In Austria, which had ratified the Anschluss with Germany and had been invaded by the Germans, the consumers' cooperatives had been "adjusted to the New Order" and were gradually disappearing. The process of destruction in both countries was complete by the end of 1942. In both countries, however, agricultural cooperatives were reported to be still in operation as far as they were useful to the Germans.

In Bulgaria and (at first) in Rumania the cooperatives were utilized for the collection and distribution of foodstuffs to the population. Later, in Rumania, they were superseded in this task by a network of State agencies.

From the beginning of the Ethiopian campaign the Italian Government encouraged the formation of new Fascist cooperatives in North Africa; the fate of these, in view of the later military events in that region, can be imagined. No data are available regarding recent developments in the Fascist cooperative movement on the mainland, where for many years they have been part of the corporative system.

Both Rumania and Finland suffered division of the cooperativ. movement through losses of territory early in the war, but in the case

of Finland these were regained after that country became an Axis satellite. In the latter country increases in both membership and (money) sales have occurred, but volume of goods handled has decreased about 10 percent.

Of all of the countries of Europe, only the cooperative movement of Hungary could, at the end of 1943, be said actually to have benefited by the war. An increase in membership and business of Hungarian cooperatives, and the additional associations gained by territorial acquisitions in Czechoslovakia and Subcarpathian-Ruthenia, combined to increase an already powerful position.

It appears, on the whole, that whatever the Nazi antagonism toward cooperatives, the Germans have not, in most cases, hesitated to make use of them. By this very fact, however, they have preserved the cooperative structure which will, with the exception of a few countries, be more or less intact for post-war, genuinely cooperative use, when membership control and operation are resumed. Concerning this, the International Cooperative Alliance recently commented:

> * * * We have yet to learn how far the movements have been inwardly affected by the abasement of their organization to the service of a regime whose whole purpose is the annihilation of all that cooperation stands for—its ideals, principles, and practice. It seems almost inevitable that the vitality of the movements will be impaired—in some cases, perhaps, that their idealistic animation may be weakened by the effects of totalitarian ideology. Most, if not all of the movements must, we think, pass through a kind of spiritual convalescence

# *Labor Organizations*

## Convention of Amalgamated Clothing Workers (C. I. O.), 1944[1]

THE Amalgamated Clothing Workers of America was organized as an independent union in 1914, when a group of workers seceded from the United Garment Workers (A. F. of L.). In 1934 the A. C. W. A. affiliated with the American Federation of Labor but was suspended 3 years later when it joined with seven other unions to form the Committee for Industrial Organization. Today, the Amalgamated is one of the five largest unions in the C. I. O.

Within a span of 30 years, this union's membership has grown from 38,000 to 325,000. Its jurisdiction includes the men's clothing and heavy outerwear industry, journeymen tailors, bushelmen, laundries, cleaning and dyeing, buttons, neckwear, gloves, wash suits, washable service apparel, bathrobes, and sportswear industries; workers in the offices and elsewhere whose services are needed to complete the product of the plants; also the retail clothing salesmen who place the garment in the hands of the ultimate consumer; and other workers in related fields.

Major accomplishments for which the Amalgamated has been acclaimed a leading progressive union include two cooperatively owned banks, a number of credit unions, two New York cooperative housing projects, and provision for life, health, and medical insurance. In recognition of this record, President Roosevelt, in his telegram to the convention, commented:

> For more than a quarter of a century, under able leadership, your organization has blazed a path of progressive and farsighted trade-unionism. You have set a standard for others to follow. * * * Your attainments are concrete evidence of the fact that constructive and amicable labor relations lead to ever-increasing benefits to industry and better standards for the men and women who earn their livelihood as wage and salary earners.

Nine hundred and seventy-four delegates and alternates from 34 States gathered in Chicago May 15–19, 1944, after a 4-year interval, for the fourteenth biennial convention of the organization. The 1942 convention had been canceled by a referendum vote, because of the needs of the war. The fact that every fifth delegate represented a newly organized worker was concrete evidence of the statement made by Sidney Hillman, president of the union, in his opening address: "We come here with the largest increase (60,000) in membership that the Amalgamated has brought to any convention in the past." Notable gains, as pointed out in the officers' report, had been made in the South, where 10,000 new members were added, and in the cotton-garment, laundry, and various service industries. Concurrently with this growth in membership had come wage increases, extension of vacations with pay, and increased stabilization in the industry.

[1] Prepared in the Bureau's Labor Information Service, by Boris Stern and Eleanor Finger.

## *Political Action*

Emphasis on political action in the coming Presidential election proved to be the keynote of the convention. The subject was touched upon in every major speech before the convention.

The delegates expressed their own attitude toward political action through the unanimous endorsement of the statement issued by the C. I. O. Political Action Committee supporting President Roosevelt for a fourth term as "the only man in public life today qualified to lead the Nation during the next 4 years." The statement further called for a drive to organize every shop, factory, and community for full participation in political activity and a wider campaign to acquaint the American people with the issues facing the country. The convention also adopted a resolution urging the renomination and election of Vice President Wallace.

## *War Problems*

Problems relating to the war effort, post-war problems, and specific union activities received the delegates' attention.

In the opening sentence of its report to the convention, the general executive board stated: "The effects of mobilization of the national economy for winning the war have pervaded every phase of the union's activity * * *." This has been evidenced by the fact that 3 or 4 of every 10 members of the union worked on military uniforms during the latter part of 1942 and the early part of 1943.

Reviewing the war record of the union, President Hillman stated that, as far as he knew, there had not been a single instance of a violation by the Amalgamated membership of the "no-strike" pledge. A determination to maintain this pledge was expressed first in a cable sent by the convention to General Eisenhower and later in a resolution reaffirming the union's intention to maintain inviolate the no-strike pledge "without condition or qualification."

Other war activities by the members of the A. C. W. A. were cited as follows:

> Thousands of Amalgamated members are serving in all branches of the armed forces. The union has fully protected the rights of these members and has rendered service to their families. On the home front the union has afforded leadership to its members in participation in the war effort. The membership's active concern with war needs is evidenced by the enthusiastic support of the Amalgamated Service Organization; by the purchase of an estimated $100,000,000 in war bonds by individual union members and by bond purchases by locals and joint boards amounting to $10,000,000; by contributions of more than $1,500,000 to war relief and to the underground movement abroad; and by the many undertakings of the department of war activities, including blood-donation schedules, sewing and knitting projects, canteens, and the distribution of literature to help consumers combat inflation. Officers and members of the union have further aided the war effort by serving on official war boards and on numerous important civic agencies. They have also participated in conferences on post-war planning.

The convention took a stand on a number of domestic issues pertaining to the welfare of labor in a war economy. One resolution urged a reenactment of the price-control law without weakening amendments. It called for subsidies on the basic necessaries of life, sufficient to stabilize prices at current levels, and for appropriations to enforce price control and rationing to wipe out the black market.

On the question of wage controls, the delegates heard President Murray declare: "I am against the Little Steel formula. * * * The disparities that have developed in the wage structure of the United States due to the application of an unworkable idea have created wider and wider and wider discriminations in the payment of wages to workers all over the United States." The delegates unanimously adopted a resolution for a sound program of general economic stabilization. They urged prompt revision of the "Little Steel" formula to permit wage increases that would reflect realistically the rise in living costs and a modification of the War Labor Board's "substandard wage" doctrine to allow increases substantially in excess of 50 cents an hour.

### *Post-War Problems*

The convention dwelt at length on a number of resolutions related to the treatment of other peoples and countries now and in the post-war years. The basic approach to such problems, as outlined by President Hillman, lay in the promotion of international cooperation as opposed to isolationism. The concrete measures advocated included—

(*a*) Abrogation of the White Paper which bars further immigration of Jews into Palestine.

(*b*) Financial and moral support for the Free Italy American Labor Council.

(*c*) Extension and implementation of the good-neighbor policy in Latin America, directed toward eliminating every vestige of imperialism. Financial and other aid was also urged for Latin American countries to permit them to develop their native industries, to raise the living standards and purchasing power of their people, and to strengthen democratic governments and institutions, especially the trade-union movement.

In order that labor's point of view may be represented adequately at the peace table, the delegates urged labor unity and the development of a strong representative international labor organization.

Turning to the home front, the convention adopted two resolutions on racial equality. The first, commending the work of the Fair Employment Practice Committee, asked that the Committee be made permanent, that discriminatory practices in the armed forces be ended, and that the Lynch-Dickstein and the antilynching bills be passed. The second demanded a reconsideration of the anti-poll-tax bill under a cloture rule in the Senate. The problem of discrimination received further emphasis from President Murray, of the C. I. O., when he told the delegates:

> We believe in abolition of all forms of discrimination. We not only adopt resolutions to that effect, but we try to make them work. * * * We are hopeful that through the instrumentality of our great C. I. O. movement and its Political Action Committee, the people of the United States some day in the not too distant future will recognize the need for eliminating these racial and other forms of discrimination.

To deal with domestic economic problems to be faced in the post-war period, the convention urged a high level of post-war national income, full employment and higher standards of living for workers to insure their economic security. Responsibility for achieving these goals, the delegates declared, rests primarily with private industry,

but private industry cannot do the job alone. They pointed out that—

> Permanent, long-range planning of our economy is essential. Successful planning must come as the product of the cooperative effort of all major groups in our national life—industry, labor, and agriculture—working with and assisted by Government. Such planning, while placing major responsibility for full employment in private industry, must be underwritten by a Government prepared to step in with a program of useful and productive work under trade-union standards if and to the extent that private industry falls short of the goal.

The necessity of achieving full employment was emphasized as a major constructive effort on behalf of demobilized service men and women. As its specific contribution to servicemen, the convention voted to instruct its national office, the local unions, and joint boards to waive payment of initiation fees for demobilized service men or women who within 2 years after their demobilization apply for and are offered jobs in the industries under the union's jurisdiction. Action has already been taken by the officers of the union to maintain in good standing its members in the service, to exempt them from all financial obligations during the war, and to assure them their old jobs upon their discharge.

A resolution on reconversion supported those proposals in the George-Murray bill which seek prompt and fair disposal of war contracts. It favored the inclusion of sections from the Kilgore bill, providing machinery to facilitate prompt reemployment of demobilized workers and supplementary Federal unemployment insurance during the period of their idleness. Prompt enactment of the Wagner-Murray-Dingell bill on social security was also urged.

### *Union Activity*

The delegates heard a report on the successful functioning of the recently established Amalgamated Insurance Fund, financed by a 2-percent employer contribution, which provides life, accident, and health insurance to workers in the men's and boys' clothing industry. Later they unanimously adopted a resolution instructing the incoming general executive board "to use its best efforts, through the processes of collective bargaining, to extend the life, accident, and health insurance plan to * * * other branches of the industry." The resolution defined health insurance as including provision for hospitalization and medical care, in order to assure workers proper medical attention in addition to giving them compensation for loss of time during the period of their illness.

The executive board received further instruction to discuss with employers the possibility of establishing an old-age fund to supplement social security payments and thus provide retired workers with an income sufficient to maintain themselves in decency and reasonable comfort. This fund would be financed by employer contributions. In commenting on these and other pioneering efforts of the Amalgamated on behalf of social security, President Hillman said:

> I hope the time will come when the Government again will put us out of this field * * *. No matter what the Government will do, there is a field for labor organizations to implement those activities. We ought never to be satisfied until the time comes when real security is given to the men and the women in our organization—and we ought to make sure that we pioneer to help bring it about in our industry and elsewhere.

In the field of workers' education, the delegates reaffirmed the union's long-time view that education of workers is provided mainly

through the participation of the membership in the day-to-day functioning of the union in the industrial, social, civic, legislative, and political fields. Specific recommendations to the general executive board included (*a*) giving careful consideration to the possibilities of expanding the services afforded to constituent joint boards and locals in carrying out an adequate educational program; (*b*) exploring the possibility of requiring each local to establish an educational committee which would be called upon to report to a general educational department; (*c*) assuring that adequate attention be devoted to promoting an understanding of all phases of the fundamentals of democracy, including the equality of all citizens, regardless of race, creed, or color; and (*d*) calling regional conferences from time to time to promote educational and recreational activities.

### *Officers and Convention City*

President Sidney Hillman and General Secretary-Treasurer Jacob Potofsky were renominated without opposition. For the executive board, the names of 35 other candidates in addition to the 15 present incumbents were designated. According to the union's constitution, final election will be determined by a referendum vote of the membership. The delegates also voted to increase the president's salary to $15,000 and that of the secretary-treasurer to $10,000.

The next biennial convention is scheduled to convene in Philadelphia in 1946.

## Membership of International Federation of Trade Unions, 1943[2]

TRADE-UNIONS in 14 countries were affiliated with the International Federation of Trade Unions, in 1943. Membership totaled 16,172,325 persons, as compared with 13,311,340 in 1941. Workers in the United States and Great Britain accounted for 41 and 37 percent of the total membership, respectively. Sweden followed, with 7 percent. The table following indicates membership for 1941–43, by country.

*Membership in International Federation of Trade Unions, by Country, 1941–43*

| Country | 1941 | 1942 | 1943 |
|---|---|---|---|
| All countries | 13,311,340 | [1] 15,081,026 | [1] 16,172,325 |
| Argentina | 180,000 | 220,000 | [3] 300,000 |
| Canada | 132,702 | 144,592 | 264,375 |
| China | 420,000 | 420,000 | [3] 420,000 |
| France | | | 120,000 |
| Great Britain | 5,432,644 | 5,800,000 | 6,024,411 |
| India | [3] 144,000 | [3] 144,000 | [3] 144,000 |
| Mexico | [3] 530,000 | [3] 530,000 | [3] 530,000 |
| Norway | 20,000 | 20,000 | 20,000 |
| New Zealand | 170,000 | 194,000 | 218,388 |
| Palestine | 125,000 | [3] 132,000 | [3] 135,000 |
| Sweden | 995,000 | [3] 1,200,000 | [3] 1,200,000 |
| Switzerland | 217,251 | 222,000 | 231,000 |
| South Africa | 50,000 | 120,000 | [3] 120,000 |
| United States | 4,894,743 | 5,954,434 | 6,564,141 |

[1] Not the exact sum of the items, but as given in the report.
[2] Does not include France, which was not readmitted until 1944.
[3] Estimates.

[2] Data are from International Federation of Trade Unions, Report on Activities, 1943–44 (London, 1944).

France was readmitted as a fully reinstated member on March 30, 1944. French North Africa was considered part of metropolitan France, and as such was the first territory in which reconstruction of a free trade-union movement was possible. Accordingly, readmission could take place.

Seven foreign trade-union groups of exiled European workers have been functioning in Great Britain, and most of them, in spite of the difficulties of organizing refugees who had not been wage earners in their homelands, increased their membership. The French registered a decrease, owing to the transfer of a number of members to the unions in Algiers. The membership of the seven groups was as follows in 1943: Belgium, 4,000; France, 400; Czechoslovakia, 1,100; Germany, 780; Austria, 720; Poland, 1,400; and Spain, 50.

## Plan for Reconstruction of German Trade-Union Movement

A CONFERENCE was held at Stockholm in February 1944, in which 27 German trade-union delegates participated, in addition to representatives of the trade-union movement of Sweden and the United States and of the Refugee Committee. The conference adopted a tentative plan for the reconstruction of the German trade-unions after the war. The plan is based upon the premise that a "free and independent trade-union movement is necessary for a future democratic Germany." The statement notes that among the German working class there is the will to reestablish such a trade-union movement as soon as the political situation permits. A prerequisite, however, is the dissolution of the Labor Front as part of the political apparatus of the Nazi regime for the suppression of the working class. Thereafter the aim is to organize rapidly in a new trade-union league the workmen and employees who have been enlisted compulsorily in the Labor Front, but maintaining the relief claims of the workmen upon the former trade-unions and the Labor Front.

The principal provisions of the plan adopted by the conference are summarized below.

*Provisional constitution of new trade-union league.*—The right of organization of the working class should be secured anew by legislative enactment. The trade-union organizations must be recognized legally as the representatives of the interests of the workmen and employees. The aim is their amalgamation in a uniform trade-union movement.

It may be expected that after the break-down of the Nazi regime the workmen will resort to spontaneous individual action in all places and factories with the object of reconstituting the trade-unions, but this action should be coordinated properly. As soon as possible a central authority should be created which will adopt all appropriate measures for looking after the workmen's interests, by coordinating all separate trade-union actions in the country. The central authority should be supported by delegates from the most important places and factories of the Reich, who may be convoked in accordance with the circumstances. It will be regarded as the central administration of the new trade-unions until a general congress of the German trade-unions and the congresses of the separate unions have appointed a final administration.

In every factory and locality, elections of trade-unions' trustees will take place immediately, and these trustees will form a local trade-union administration. The "illegal" trade-union groups which have arisen to combat Hitlerism will constitute an important factor in the reconstruction of the organization.

The central committee should be assisted by a temporary league committee consisting of representatives of the separate unions and districts. The final organization of the trade-unions, by industries or professions, will be determined by the trade-union congresses of the German workmen themselves. Trade-union democracy should not be thwarted by any authoritarian organ or organs created by non-German workmen. In order to unite the workmen and employees in the enterprises and in order to secure their democratic right to vote, an immediate election of provisional factory councils will be necessary. Care should be taken that they, being the representatives of the workmen, are granted a proper influence in the trade-unions.

The agricultural workers who were compulsorily organized in the Reich Food Estate must again be united in a new, strong union of agricultural workers. The teachers and officials whose trade-union organizations were also liquidated will likewise need to unite in trade-unions. Trade-union organization of the working women and girls will be one of the principal tasks of the new trade-union movement.

It will be necessary to carry on extensive educational and organizational work among juvenile workers and apprentices, and to look after their economic, social, and intellectual interests. It will be the duty of the central administration to provide immediately the material and technical conditions for the publication of trade-union newspapers.

*Trade-union independence of political parties and the State.*—The trade-unions organize wage earners and salaried employees regardless of their political and religious views. The trade-unions must be independent of political parties but will maintain friendly relations with the parties which support their aims. The trade-unions must also be independent of the State, and must not have the character of State organs. Their activity is to be carried on in accordance with the principles of the labor organizations. In looking after the interests of the workers and employees, the freedom of decision and action of the trade-unions should not be subjected to governmental directives and guidance.

*Economic-political demands.*—In accordance with their social significance, the trade-unions should be granted an influence on governmental economic policy, especially during the reorganization of economy from war to peacetime production. One of the first and most important tasks of the trade-unions immediately after the war will be their cooperation in the foodstuff supply, the procurement of accommodations and work and the enlistment of the demobilized soldiers in the production process. During the realization of these measures the trade-unions should participate in both planning and control.

*International contacts.*—The new German trade-unions advocate the establishment of a uniform trade-union international which will unite all organizations ready to join. Until that is done the German trade-unions will strive for a contact with the international trade

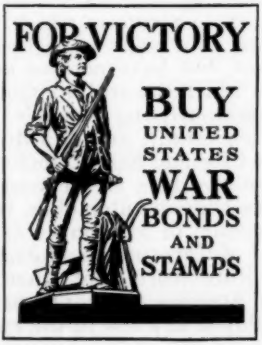
union movement as an independent section with equal right. The separate unions will likewise rejoin their international organizations. "The comradely advice and the united help of the international trade-union movement will be of far-reaching importance for the German trade-union movement and the whole German working class."

## Membership of South African Trades and Labor Council

THE membership of the trade-unions affiliated with the South African Trades and Labor Council totaled nearly 148,000 in 1943, according to the annual report of the organization for that year.[3] As it is customary for member unions to affiliate with the Council at less than full strength it is probable that the actual membership is larger. On December 31, 1943, the number of affiliated members was 36,178, representing an increase of 3,067 from the end of 1942.

In the report from which the statistics are taken it is stated that the Council's persistent efforts and readiness to advise and keep personal contact with many organizations that were not yet affiliated had been very successful. Negotiations were in progress with other registered unions for the purpose of securing their affiliation. Appeals had been made to the Government to have certain restrictions on railway workers' organizations removed, thereby enabling them to become more closely connected with the general trade-union movement.

[3] Annual Report and Balance Sheet [of the South African Trades and Labor Council] for the period January 1 to December 31, 1943. Johannesburg, 1944.



## Collective Bargaining in the Airframe Industry

SHORTLY after the passage of the National Recovery Act the American Federation of Labor chartered a number of local (federal) unions in the aircraft industry. In October 1934 jurisdiction over aircraft workers was assigned to the International Association of Machinists (A. F. of L.). Although that union was able to negotiate agreements covering the Boeing Seattle plant in 1936, and the Lockheed-Vega, the Consolidated Vultee (San Diego), and the Curtis-Wright (St. Louis) plants in 1937, its greatest organizational strides in the industry have been made in the last few years.

The United Automobile, Aircraft, and Agricultural Implement Workers of America (C. I. O.), originally established to organize workers in the automobile industry, specifically amended its jurisdiction in 1937 to take in aircraft workers. In that same year this union obtained bargaining rights for its members in a few of the large West Coast plants, but these agreements were not renewed in 1938. In 1939 the U. A. W.-C. I. O. renewed its organizational efforts in the aircraft industry and by 1940 had negotiated agreements covering several major plants, including those of the Brewster Aeronautical Corporation, Bell Aircraft (Buffalo), and Consolidated Vultee (Vultee Field, Calif.). Agreements with additional plants were negotiated subsequent to the beginning of the defense production program.

Approximately 65 percent of the workers in the airframe industry are now covered by union agreements. Another 20 percent of the industry's employees work in plants in which unions are recognized as sole bargaining agents, as a result of victories in National Labor Relations Board elections, but have not yet negotiated agreements. Among the large plants which are still unorganized are those of the Republic Aviation Corporation (Long Island, N. Y., Division) Northrop Aircraft Inc. (Hawthorne, Calif.), and two divisions of the Douglas Aircraft Co. (Oklahoma City and Santa Monica).[2]

Almost all the airframe workers are represented in approximately equal proportions by the United Automobile Workers (C. I. O.) and the International Association of Machinists (A. F. of L.). The International Brotherhood of Carpenters and Joiners of America (A. F. of L.), the United Furniture Workers of America (C. I. O.), and the United Steelworkers of America (C. I. O.) each represents a small number of workers employed in a few of the industry's minor plants.

[1] Prepared by Everett M. Kassalow of the Bureau's Industrial Relations Division.
The airframe industry in this report includes only establishments which in 1939 were engaged in the manufacture and assembly of complete aircraft, and new plants established in this industry since 1939. Plants which have been converted to the industry since 1939 are excluded from the study.

[2] In a few of these plants, as well as in some others in the industry, craft unions have negotiated agreements covering certain skilled groups. Among the most important of these are the United Aircraft Welders of America (independent), the International Brotherhood of Electrical Workers (A. F. of L.), and the Pattern Makers League of North America (A. F. of L.). Since the present report deals primarily with the production workers, the agreements for these special groups are not included in the discussion.

## *Coverage and Duration of Agreements*

The following discussion is based on an analysis of 26 agreements in effect in June 1944,[3] which cover more than 95 percent of the employees in the industry who are working under agreement. The analysis has been supplemented by examination of National War Labor Board case data involving most of the plants covered by these agreements.

Seventeen of the agreements were originally negotiated for a 1-year period but are automatically renewed from year to year unless a 30- or 60-day notice of intention to change or terminate has been filed by either party. Nine are in effect for the duration of the war, although a few of these permit termination on 30 days' notice. More than half of the agreements state that their terms and conditions are binding upon any successors or assignees of the signatory parties.

Certain occupational groups, such as office workers, plant protection employees, supervisors, and foremen, usually are excluded from the coverage of the agreements. In addition, a few agreements exclude maintenance and skilled craft workers such as welders and electricians.

## *Union Status*

In addition to granting sole bargaining recognition, most of the 26 agreements furnish additional protection to the union through some form of union security.

Union membership is required as a condition of employment, under the Boeing (Seattle), Brewster, Fleetwings, and Ford Willow Run Bomber agreements. These cover almost one-fifth of the workers under the 26 agreements. The Boeing and Brewster agreements also provide for preference in hiring to union members; the other two leave control over hiring entirely to the employer.

[3] The plants covered in this report, and the unions with which the agreements have been made, are listed below:

| | |
|---|---|
| Beech Aircraft Corporation, Wichita, Kans. | International Association of Machinists, A. F. of L. |
| Bell Aircraft Corporation, Buffalo, N. Y. | United Automobile Workers, C. I. O. |
| Boeing Aircraft Corporation: | |
| Wichita, Kans. | International Association of Machinists, A. F. of L. |
| Seattle, Wash. | Do. |
| Brewster Aeronautical Corporation, Long Island City, N. Y., and Johnsville, Pa. | United Automobile Workers, C. I. O. |
| Cessna Aircraft Co., Wichita, Kans. | International Association of Machinists, A. F. of L. |
| Consolidated Vultee Aircraft Corporation: | |
| Vultee Field, Calif. | United Automobile Workers, C. I. O. |
| San Diego, Calif. | International Association of Machinists, A. F. of L. |
| Nashville, Tenn. | Do. |
| Curtiss-Wright Corporation, Airplane Division: | |
| Louisville, Ky. | Do. |
| St. Louis, Mo. | Do. |
| Buffalo, N. Y. | Do. |
| Columbus, Ohio | United Automobile Workers, C. I. O. |
| Fairchild Engine & Airplane Corporation, Hagerstown, Md. | Do. |
| Fleetwings Incorporated, Bristol, Pa. | Do. |
| Ford Motor Co., Willow Run Bomber Plant, Ypsilanti, Mich. | Do. |
| General Motors Corporation, Fisher Body Bomber Plant No. 2, Cleveland, Ohio. | Do. |
| Goodyear Aircraft Corporation, Akron, Ohio | Do. |
| Lockheed-Vega Aircraft Corporation, Burbank, Calif. | International Association of Machinists, A. F. of L. |
| McDonnell Aircraft Corporation, St. Louis, Mo. | Do. |
| North American Aviation, Inc.: | |
| Inglewood, Calif. | United Automobile Workers, C. I. O. |
| Kansas City, Kans., and Dallas, Tex. | Do. |
| Republic Aviation Corporation, Evansville, Ind. | Do. |
| Ryan Aeronautical Co., San Diego, Calif. | Do. |
| Spartan Aircraft Co., Tulsa, Okla. | International Association of Machinists, A. F. of L. |
| United Aircraft Corporation, Chance-Vought Aircraft Division, Stratford, Conn. | United Automobile Workers, C. I. O. |

Maintenance-of-membership clauses are included in 14 agreements, in most cases as a result of a National War Labor Board order. The maintenance-of-membership clauses cover more than half of the workers, including those at the North American plants, the Curtiss-Wright plants at Buffalo and St. Louis, the Boeing plant at Wichita, Beech Aircraft, Bell Aircraft, Goodyear, and the Chance-Vought Aircraft Division. Four of the fourteen require the company to furnish new employees copies of the agreement. At Beech and Boeing (Wichita) the company supplies the union desk space in the personnel department for the purpose of serving the membership and "handling the affairs of the union." At Beech Aircraft the union is permitted to "interview all new employees who are included in the standard union classification"; the union, in turn, agrees to "inform each employee who is interviewed, at some time during the interview, that the matter of union membership is optional."

One agreement with McDonnell Aircraft requires the company to give preference to union members in hiring and to furnish a copy of the agreement to all newly hired employees. The remaining 8 agreements, including the Curtiss-Wright plants at Louisville and Columbus, the three Consolidated Vultee plants, and Lockheed, make no reference to union membership as a condition of employment. The Lockheed agreement stipulates that the company is to supply copies of the agreement to new employees and to urge them to "give due consideration to membership in the union." The Consolidated Vultee San Diego agreement provides that all persons newly employed by the company "who are eligible for membership in the union shall be given by a company representative before beginning work a copy of this agreement, a company rule book, and a union membership application to which is attached a dues deduction order * * * which membership and order the company hereby recommends."

Union activity or solicitation of members on company time is specifically prohibited in about half of the agreements. The Beech agreement, however, permits such activities by union members during their "free time," as long as they "do not interfere with the efficiency of the employees" whom they address. Nearly all the agreements grant the union the right to the use of a bulletin board within the plant, for posting notices, but such notices are generally subject to the management's approval before posting.

### *Check-Off of Dues*

Eighteen agreements include some form of check-off of union dues by the company; however, only 5 of these provide for an automatic dues check-off for all members of the union, while the remaining 13 permit check-off after individual employees authorize deductions from their pay for union dues. Of the 5 agreements which establish an automatic check-off, 2 are with plants which operate under union-shop clauses and the other 3 cover plants where maintenance of membership is in effect.

Seven of the thirteen agreements which permit voluntary deductions of dues contain maintenance-of-membership clauses, 5 merely recognize the union as the sole bargaining agent, and 1 establishes a union shop. The Boeing Seattle agreement, in addition to providing for a voluntary check-off of union dues, states that the union's shop committee "shall check all employees' union books on the job between the 5th and the 10th of each month."

## *Wage Provisions* [4]

Largely as the result of the influence of the National War Labor Board, most of the organized plants in the airframe industry now operate under the so-called 10-labor-grade wage system. Under this system 10 basic labor grades are established, with minimum and maximum rates for each of the grades. All jobs are classified on the basis of a job-evaluation system, the factor of skill carrying the greatest weight in the evaluation. After a job is evaluated it is placed in its proper labor grade; thus, jobs of least skill are placed in labor grade X, which carries the lowest rates, while those involving the greatest training and skill are classified in labor grade I. Jobs of intermediate skill are graded anywhere from II to IX, depending upon their evaluation.[5]

Minimum and maximum rates are established for each labor grade, and a worker who starts at the minimum of a given labor grade may receive increases which will bring him to the maximum of that grade. Under the Southern California plan, which governs all of the major assembly plants in California, such increases from the minimum to the maximum of the labor grade are not automatic but are granted as a reward for individual merit. At the Consolidated Vultee San Diego plant a union-management committee reviews each employee's record every 6 months, to determine his eligibility for a merit increase.

The other California agreements also require management to conduct such reviews periodically, but limit the union's participation to the right of appealing the company's decisions to the grievance machinery. Some of the agreements covering airframe plants outside of California, including the four Curtiss-Wright plants as well as Cessna Aircraft, provide for automatic progression from the minimum to the maximum of a labor grade with 5-cent increases every 3 months until the grade maximum is reached.

Although most of the plants have adopted the 10-labor-grade system, the rates established for each of the grades and the grades assigned to individual jobs may vary from plant to plant. Under the Southern California plan, as well as in some other plants, most jobs are divided into A, B, and C classes, depending upon the degree of skill and responsibility required, with the classes assigned to the various labor grades. (The A job receives the top rate, B the intermediate, and C the lowest rate.) In an effort to bring about standardization in the California aircraft plants, the National War Labor Board ordered all plants to adopt the same rates for each of the 10 labor grades and appointed a West Coast Aircraft Committee to assist the companies and unions in administering the plan. Under this arrangement, any new job not covered by the plan is "by collective bargaining * * * classified, evaluated, and assigned to the appropriate labor grade * * * provided, however, that in the event of failure of collective bargaining the West Coast Aircraft Committee shall make all necessary deter-

[4] For a more detailed discussion of wages in the metal airframe industry, including nonunion plants, see Monthly Labor Review, May 1944 (p. 1050).

[5] For a description of the mechanics of the 10-labor-grade system, see U. S. Bureau of Labor Statistics Bulletin No. 746: Wage Stabilization in California Airframe Industry, 1943.

mination."[6] The Southern California rates and job evaluation system have been extended by the National War Labor Board to several midcontinent airframe plants, including the North American Co. (Kansas City and Dallas) and the Consolidated Vultee Nashville plant.

In some cases the 10-labor-grade system has been somewhat modified in its adoption at individual plants. The Boeing agreement, for example, establishes 10 labor grades, but establishes one flat rate which serves as both maximum and minimum for each labor grade, i. e., 10 rates in all with no range within each grade.

*Safeguards against wage cuts.*—Because of the numerous technological changes occurring in aircraft production, clauses protecting the earnings of workers whose jobs are affected by such changes have assumed special importance. The Brewster agreement guards against reductions in established classifications by providing that, "there shall be no reduction in rates of pay for established classifications or grades of classifications during the term of this agreement except as mutually agreed upon."

The National War Labor Board directive order in the Southern California Aircraft case stated that in no case was the introduction of the job-classification system to "operate to cause a decrease in the hourly wage rate of any employee." This provision would protect the rates of workers employed at the time the directive order was issued, even though some jobs might be classified at a lower rate after the SCAI plan went into effect. New employees hired for these same jobs would receive the rates established under the job-classification system.

*Lead men.*—Special wage differentials for "lead men" are established by a number of these agreements and, although the others make no reference to such differentials, they are known to be actually in effect in most of these plants.[7] Of the 12 for which these rates are available, 5 allow any lead man at least 5 cents per hour more than

[6] National War Labor Board decision in Southern California airframe case, March 3, 1943, National War Labor Board release B467. The rates set for the different labor grades under the Southern California plan are as follows:

| | *Minimum* | *Maximum* |
|---|---|---|
| Labor grade X | $0.75 | $0.80 |
| Labor grade IX | .80 | .90 |
| Labor grade VIII | .85 | .95 |
| Labor grade VII | .90 | 1.00 |
| Labor grade VI | .95 | 1.05 |
| Labor grade V | 1.00 | 1.10 |
| Labor grade IV | 1.05 | 1.20 |
| Labor grade III | 1.10 | 1.25 |
| Labor grade II | 1.20 | 1.35 |
| Labor grade I | 1.25 | 1.45 |

The board added that, "having due regard for the processes of collective bargaining, an employer may establish specialist rates for exceptionally qualified * * * employees in labor grade I, II, III, and IV as follows: Grade I, not to exceed $1.60 per hour; grade II, not to exceed 1.45 per hour; grade III, not to exceed $1.35 per hour; grade IV, not to exceed $1.30 per hour. Provided, however, that in any plant the number of employees receiving such specialist rates shall not exceed 10 percent of the employees in any labor grade for which such a specialist rate may be fixed."

[7] The West Coast Aircraft Committee of the National War Labor Board has issued the following uniform job description for lead men in the California plants: "This occupation requires the transmitting of supervision orders and work instructions to a group of not more than 20 workers * * * engaged in an occupation, craft, trade, or closely related operations; working with the group to see that work is properly done. * * * (Lead men shall not pass upon wages, employment, or discharge of employees.) * * * The operations consist of giving immediate direction as to work or machine operations, work methods, and shop or office practices, and machine or work set-ups for lay-outs for demonstration purposes, seeing that given personnel, machines, tools, and equipment are properly utilized for work at hand, imparting current or new trade, craft, or occupational knowledge to workers, giving necessary guidance to employees, and performing work similar to that assigned to the group for a major portion of time. Similar work shall be construed to include time spent in guidance of employees on the job or in performing work demonstrations" (West Coast Aircraft Committee, Order No. 54, Nov. 5, 1943).

the highest-paid employee in the group he leads, 2 set this differential at 6 cents, 1 at 8 cents, and the other 4 fix a 10-cent differential.[8]

### INCENTIVE PLANS

Only 3 of the 26 agreements refer to incentive systems. The Chance-Vought Aircraft Division and the Beech Aircraft Corporation agreements provide plant-wide incentive systems which cover both production and nonproduction personnel. Both plans are based on the entire plant output for a given period (1 month in Chance-Vought, 3 months in Beech Aircraft), with workers' earnings rising and falling in proportion to increases or decreases in output during the specified periods. The Beech plan, which is an outgrowth of an earlier profit-sharing system, also includes a rather unique up-grading system: merit increases within job classifications are dependent on an employee's performance in 2 examinations, one written and one a performance test, jointly prepared and administered by management and union. The other agreement which refers to an incentive system indicates that certain groups of production employees in the plant work on an incentive basis, but does not state the nature of this system.

### MINIMUM AND HIRING RATES

Information on plant-wide minimum wage rates is available for all but four of the plants included in the report. While these m nimum hourly rates range from 75 cents to 82½ cents, 13, including all the California plants, provide a plant minimum rate of 75 cents.

All but 1 of the 22 agreements which provide plant minimum rates include hiring rates for new, inexperienced workers below the general minimum scale. In 17 the difference between hiring and minimum rates is 15 cents, and in 5 this difference is 10 cents. All of the agreements which contain special hiring rates provide that new employees are to be advanced to the plant minimum by means of successive, automatic increases within a specified period (usually 3 months); in most of them the employee is advanced 5 cents each month until he reaches the plant minimum.

### INTERIM WAGE ADJUSTMENTS

Ten agreements specifically permit reconsideration of the general wage scale during the life of the agreement. Most of these allow reconsideration of wages only at specified intervals (usually every 6 months), although 2 which are in effect for the duration permit the wage question to be reopened on 30 days' notice by either party. The wage question may be reopened in the event of a "major change" in the present wage-stabilization program, under a few additional agreements.

[8] A recent directive order of the West Coast Aircraft Committee established the following rates for lead men: "The minimum rate of pay shall be equal to the maximum of the 'A' job grade of the highest occupation of any employee who remains within the group led for not less than a major portion of a given pay period. The maximum rate of pay shall be 10 cents above the maximum rate of the 'A' job grade of the highest occupation of any employee who remains within the group led for not less than a major portion of a given pay period. Provided, however, that in no case shall lead men receive less than 90 cents per hour or less than the minimum provided by contract, whichever is higher. * * * The methods of progression within the rate range herein established shall be the merit increase system currently used in each of the companies. * * * There shall be no reduction in pay for any person now performing the duties of lead men by reason of the application of this order" (West Coast Aircraft Committee, General Order No. 74, June 13, 1944).

When changes in production requiring new rates or classifications are introduced, most of the agreements require the management to consult with the union before putting into effect any new rates or changing the old ones. A few state that if the parties cannot agree on a new rate the management may establish a temporary rate pending final settlement by the National War Labor Board, with any upward adjustment ordered by the Board to be retroactive.

### MINIMUM CALL PAY AND RECALL FOR OVERTIME

All but one of these agreements require payment of a minimum amount to employees who report at their regular time but are not employed for a full shift. Nineteen guarantee a minimum of 4 hours' reporting pay, three of the others guarantee 3 hours, and two provide only 2 hours' reporting pay. The Boeing agreement provides that any employee required to report for work is to receive pay for the number of hours he is regularly scheduled to work.

Although not specified, the same minimum call pay probably applies to work outside regular hours in most plants, and more than half of the agreements specifically provide such guaranties for workers who are recalled after their regular shifts. A few of the agreements establish overtime rates for such "recall" work.

### SHIFT DIFFERENTIALS

All of these agreements allow wage differentials for night work and a majority of the workers are allowed 8 hours' pay for less than 8 hours' work on the third shift. One-third of the workers under these provisions are also entitled to an hourly bonus of 6 cents for both second and third shifts. Most agreements do not explain whether shifts are fixed or rotated. One agreement permits the rotation of custodial employees, while two others state that the question of shift rotation is to be worked out jointly by management and union. Some of the agreements specify that the management is to notify the union in advance before changing the starting time of any shift.

The proportions of workers under agreements providing differentials for the various shifts are shown in the following table:

*Wage Differentials for Night Work in Union Agreements in the Airframe Industry*

| Proportion of workers covered by differentials | Differential paid for— | |
|---|---|---|
| | Second shift | Third shift |
| 1 percent | 5 percent per hour | 5 percent per hour. |
| 9 percent | 5 cents per hour | 5 cents per hour. |
| 7 percent | do | 10 cents per hour. |
| 1 percent | 8 cents per hour | 11 cents per hour. |
| 1 percent | 10 cents per hour | 10 cents per hour. |
| 3 percent | 9 cents per hour | 9 cents per hour, plus 8 hours' pay for 7½ hours' work. |
| 6 percent | 5 cents per hour | 8 hours' pay for 6½ hours' work. |
| 5 percent | do | 5 cents per hour, plus 8 hours' pay for 6½ hours' work. |
| 33 percent | 6 cents per hour | 6 cents per hour, plus 8 hours' pay for 6½ hours' work. |
| 1 percent | 7 cents per hour | 5 cents per hour, plus 8 hours' pay for 6½ hours' work. |
| 2 percent | 7½ cents per hour | 7½ cents per hour, plus 8 hours' pay for 6½ hours' work. |
| 7 percent | 8 cents per hour | 8 cents per hour, plus 8 hours' pay for 6½ hours' work. |
| 18 percent | 10 cents per hour | 5 cents per hour, plus 8 hours' pay for 6½ hours' work. |
| 6 percent | do | 10 cents per hour, plus 8 hours' pay for 6½ hours' work. |

MISCELLANEOUS WAGE PROVISIONS

*Equal pay for equal work*—Most of the agreements expressly prohibit different rates for women performing the same work as men and none of the 26 refers to special rates for women.

*Transfer rates.*—Most of the agreements do not refer to transfer rates. Under the terms of five agreements, workers temporarily transferred to lower-paid positions receive their regular rate unless such a transfer is to avoid lay-off for lack of work in the employee's regular position. Four of the five indicate that if employees are temporarily transferred to higher positions, the higher rate is to prevail; but two qualify the application of the higher rate by requiring an employee to be on the higher-paying job at least 4 hours before the new rate becomes effective, while a third requires at least 3 days on the new job before receiving the higher rate.

*Injured employees.*—Employees who are injured on the job and sent home because of such injuries receive pay at their regular hourly rate for the remainder of the shift on which the injury occurred, under 9 agreements.

## *Pay for Overtime and Week-End Work*

Overtime pay for all work in excess of 8 hours per day or 40 hours per week, at time and a half, is provided for production workers in all the agreements and for maintenance workers in nearly all.[9] Most of the agreements which provide 8 hours' pay for 6½ hours' work on the third shift also state that workers on this shift are to receive overtime after 6½ hours' work per day or 32½ hours' per week. Two-thirds of the agreements require the management to distribute overtime equally among employees affected.

In accordance with Executive Order No. 9240, all but two of the agreements (these exceptions were negotiated before the order was issued) provide for time and a half for the sixth day and double time for the seventh day worked in a workweek, while prohibiting any premium pay for Saturday and Sunday as such.[10] In about half of these agreements this prohibition on week-end premium pay is limited to the war emergency, with some specifically providing for the restoration of Sunday and Saturday penalty rates (generally time and a half for Saturday and double time for Sunday) after the war, while others merely call for renegotiation of this issue in the post-war period.

## *Holidays*

Six agreements, covering more than one-fourth of the workers under the 26 agreements, and including those at Lockheed-Vega, Brewster, Beech, Cessna, McDonnell, and the Boeing Wichita plant, provide pay for holidays not worked. Four of the six require payment for six specified holidays, while the Beech and Cessna agreements limit such pay to four designated holidays per year. Two of the six agreements stipulate that when an employee is scheduled to work on a holiday

[9] Under the Fair Labor Standards Act maintenance workers would, of course, be paid time and a half after 40 hours per week but not after 8 hours per day. Under the Walsh-Healey Public Contracts Act all employees are paid time and a half after 8 hours per day.

[10] "On all work relating to the prosecution of the war" Executive Order No. 9240 prohibits premium pay for Saturday and Sunday work as such, and makes the payment of double time for the seventh consecutive day of a regularly scheduled workweek mandatory.

but fails to appear, he shall receive no compensation for this day. The Fairchild agreement permits 8 holidays with pay in peacetime, but none in wartime.

Twenty-one agreements conform to the Government provision that time and a half be paid for work performed on six designated holidays, although several of these provide for a return to double-time rates for holiday work at the cessation of hostilities. The remaining five agreements establish double-time rates for holiday work but have been superseded by Executive Order No. 9240.[11]

### *Paid Vacations and Sick Leave*

Paid vacations for workers who meet specified service qualifications are found in all the agreements. Twenty-two grant 1 week's vacation with pay after 1 year of service. Although 7 of the 22 have only this single vacation provision, the other 15 provide increased vacation allowances for workers with longer service. The Brewster and Fairchild plans permit 2 weeks' paid vacation after 2 years' service; the Lockheed, Goodyear, Ford, and 3 others allow 2 weeks' paid vacation with pay for workers with 5 years' service. The 4 Curtiss-Wright agreements and 3 others grant an additional day, beyond the 1 week, for each additional year of service up to a maximum of 10 days after 6 years of service.

More than half of the 15 agreements which provide for graduated vacation schedules also grant smaller vacation allowances for workers with less than a year of service; these generally require a minimum of 6 months' service, after which a worker becomes eligible for vacation benefits prorated according to number of months worked.

The Boeing Seattle agreement establishes a somewhat unusual vacation practice, under which each employee is to "earn and accumulate a vacation allowance of 1 work hour for each 22 hours worked" every year, with "work hours used by the employee as vacation with pay * * * deemed to have been hours worked." Workers in the three Consolidated Vultee plants who have completed a year or more of service are entitled to 96 hours of vacation or sick leave annually, to be taken as the employee may elect.

Vacation pay is generally calculated on the basis of a 40-hour week, although six agreements base this pay on a 48- and one on a 45-hour week; three of these, however, limit such pay to periods when the company is operating on a 6-day week.

Compensatory pay in lieu of vacations is permitted in about half the agreements, in most cases at the discretion of the company. The Chance-Vought agreement specifies that if "there is a scheduled vacation general shut-down period, an employee eligible for a vacation shall be paid, in addition to his vacation wage, time and one-half for all hours he may be required to work during the first week of such scheduled vacation" and straight time for all hours he may be required to work on any additional scheduled vacation days.

*Sick leave.*—Provisions establishing paid sick leave are included in 10 agreements covering almost half of the workers under the 26 agreements. Five of the ten, covering the Ryan, Lockheed-Vega, Republic,

[11] Executive Order No. 9240 requires the payment of time and a half on New Year's Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day and either Memorial Day or one other holiday of greater local importance, and prohibits premium pay for any other holiday.

Brewster, and Spartan plants, allow 5 days' sick leave with pay each year for workers with 1 year of service. The North American agreements grant 56 hours of paid sick leave annually for workers with 1 year's service; these agreements further specify that workers are to be compensated for unused sick leave. As previously indicated, the 3 Consolidated Vultee agreements provide 96 hours of combined paid sick leave and vacation leave for employees with 1 year of service.

### *Military Service*

Reemployment and seniority rights of employees who volunteer or are drafted for military service are referred to in most of these agreements. A majority follow the Selective Service Act by providing that any employee who is honorably discharged is to be restored to his former position, or one of similar status and pay, with no loss in seniority, if he reports to work within a specified period. Some of the agreements limit this period to the 40 days granted under the act, but most of them allow a longer period, and a few permit an extension if the returning serviceman is suffering from illness or injury. Twenty agreements specifically provide for accumulation of seniority during military leave.

If the discharged employee is not able to perform his regular duties, owing to any sickness or injury incurred during his service, the Brewster agreement states that he is to be reinstated to any position which he can fill, and when and if he recovers, he is to be returned to his regular job. A few other agreements grant similar rights to discharged servicemen who are disabled, if their seniority entitles them to other positions they can perform.

Under three of the Curtiss-Wright agreements, the wives and sisters of Curtiss-Wright workers entering the armed forces are given preference in employment if they are qualified for available work. The Consolidated Vultee Downey (Calif.) agreement accords similar preference to the next of kin of any head of the family who leaves the plant to enter military service.

In most of the agreements the company is specifically required to pay earned vacation bonuses to employees entering military service, and a special supplementary bonus is provided under five agreements. Three of the five, covering the North American plants and the Chance-Vought Aircraft Division, state that any employee with 1 year's service is to receive 80 hours' pay upon entering military service. The Chance-Vought agreement further provides a military severance bonus of 40 hours' pay for workers with from 6 to 12 months' service. The Spartan Aircraft agreement requires the company to pay 2½ days' pay to employees with 6 to 12 months' service, who enter the armed forces, and 5 days' pay for those with a year or more of service. All workers under the Brewster agreement receive a "severance allowance" of $50 upon entering military service.

### *Leave of Absence*

Leaves of absence without pay, for personal reasons such as illness, settlement of an estate, jury duty, etc., are permitted in 19 of these agreements. Most of them limit such leave to 90 days or less (generally a longer period is granted for sick leave) and state that workers

shall accumulate seniority during their absence. Seven additional agreements allow such leave only for personal illness.

All of the agreements permit workers to take leave of absence for union business, and most of them establish no time limit for this leave. Cumulative seniority for employees on leave for union business is provided for in 20 agreements; in the others, seniority status is not clear.

### *Safety and Sanitation*

Clauses relating to health, safety, and sanitation are contained in most of the agreements. Generally they consist of pledges by the employer to make provisions for the employees' safety and health at the plant by installing adequate safety devices, etc. More than half of the agreements provide for union participation in the administration of the plant health and safety rules by means of a special safety committee on which both union and management are represented.

The Republic Aviation and the Boeing Wichita plant agreements specifically provide two rest periods for each shift, and two others also make reference to rest periods which are said to be in effect, without indicating the exact number of periods.

### *Seniority Rules*

Seniority rights acquired after serving specified probationary periods are provided in all the agreements. Probationary periods vary from 30 days to 6 months, but the majority require either 12 weeks or 3 months. Workers hired as "beginners" at the Ryan Aeronautical plant serve a 12-week probationary period; new employees "not hired as beginners" obtain seniority rights after 30 days. Seniority rights once acquired apply to lay-offs, rehiring, and promotions. In addition senior employees have first choice of shifts and vacations in almost half the agreements, including most of the larger plants.

Only three agreements fail to define the unit in which seniority applies. Department or plant-wide seniority is most frequently specified, in about equal proportions, although a few agreements make provision for occupational or "occupational-code" seniority. Where departmental seniority is in effect, the agreements frequently allow workers who are laid off on the basis of seniority in the given department to qualify for work in other departments where the seniority list has been exhausted; their status in the new department is usually of a temporary nature and they are returned to their regular departments when work is available there.

Five agreements which provide department seniority specifically indicate an employee's seniority status on transfer to another department. In two agreements the employee retains his standing in his old department, and his seniority in the new department dates from the time of transfer. In two others an employee transferred at his own request retains seniority in his old department for 6 months, after which all his seniority is carried over to the new department; if an employee is transferred at the request of the company all his seniority is immediately carried to the new department. In the fifth agreement transferred employees carry all their seniority to the new department after 6 months.

Under 11 agreements employees transferred to other plants of the same company not covered by the same agreement, retain and accumulate seniority at their old plants.

*Loss of seniority.*—The conditions under which seniority rights are lost are described in detail in almost all the agreements. Most commonly seniority is retained during periods of enforced lay-offs; however, this period is generally limited to a specified length of time—usually 2 years—after which seniority rights are lost. A few agreements require laid-off employees to notify the company periodically of their desire to be retained on the seniority list.

In addition to conditions arising from lay-offs, other grounds for loss of seniority mentioned include failure to report within a specified time (from a few days to a few weeks) when recalled by the company, absence for 3 days without notifying the company, engaging in outside employment while on leave of absence, and inability of the company to find the worker when desiring to recall him to work.

## *Lay-Off and Rehiring*

In selecting workers for lay-off and rehiring, seniority is the determining factor in all but a few agreements. The few agreements which do not make seniority the determining factor in lay-offs indicate that it is to be given consideration along with ability, efficiency and similar factors.

When lay-offs occur and more than one type of work is included in the plant or department unit to which seniority applies, longer-service employees may displace shorter-service employees, provided, as expressed in one agreement, the "employees with seniority * * * are qualified and willing to do the work of employees displaced." In one case "if a reasonable doubt exists" as to the ability of the senior employee to perform the job of the worker he displaces, "he shall be given not to exceed 5 days in which to demonstrate that he will be able and competent to perform such work efficiently within a reasonable time." Another agreement refers to a "reasonable breaking-in period" for senior employees.

Special arrangements to cover temporary lay-offs (usually not to exceed 10 days), caused by machinery break-down or shortage of material, are found in a few agreements. In these cases the company distributes the lay-offs among the workers immediately involved, instead of following the seniority rules prescribed by the agreement for "regular" or extended lay-offs.

If operations or departments are transferred from one plant of the company to another, the Goodyear agreement states that "employees engaged in such operations or employed in such departments, who are out of work as a result of the transfer, may if they so desire be transferred to the other plant and carry their ranking for seniority to the other plant." Ten agreements, including Brewster, two Curtiss-Wright plants (Buffalo and St. Louis), Goodyear, and Ford, protect employees whose occupations or departments are completely discontinued as a result of changes in production methods, policies or products by permitting them to exercise their seniority on a plant-wide basis, by "bumping" junior employees.

*Lay-off notice.*—Advance notice of lay-offs to employees or to the union, or to both, is required in about three-fourths of the agreements,

although most of these do not require the company to give notice if the lay-off is only of a temporary nature. In most cases the length of this notice is either 2 or 3 days. Pay in lieu of notice is specified in two Curtiss-Wright (Buffalo and Columbus) agreements and in four others.

*Work sharing.*—Reference to work sharing is found in five agreements. Three state that if lay-off of regular employees become necessary, work will be shared until the hours are reduced to 32 per week. Under one North American agreement (covering the Kansas City and Dallas plants) work sharing is permitted, down to a week of 32 hours, for a temporary period not to exceed 4 weeks; if at the end of this period "the production schedule has not been revised up to a point where it is possible to maintain a 40-hour workweek, further lay-offs" are to be made on the basis of seniority. At Bell Aircraft, when there is prospect "of a severe reduction of the working force, requiring a lay-off of individuals with seniority, it is mutually agreed that the company and the union will jointly discuss the problem at the time of such lay-off, with reference to the length of such workweek and schedule of hours."

*Lay-off of union stewards.*—Eighteen agreements place union stewards at the head of the company seniority list, so far as lay-offs are concerned. Most of these also accord similar preference to officials of the local union who are employed in the plant.

## *Promotions*

The method of promotion and of filling vacancies is outlined in 24 agreements. In most of these seniority is considered along with other factors such as ability, skill and competence, and when these qualifications are approximately equal, seniority is then made the determining factor. In seven agreements, including Brewster, Boeing (Seattle), Lockheed, Beech, Fleetwings, and two Consolidated Vultee plants (Vultee Field and Nashville), seniority governs promotions where the senior man is capable of filling the position, but several provide a trial period on the new job as a test for promotion.

*Supervisory force.*—Only six agreements require the management to give consideration to seniority in making promotions to supervisory positions. Under the agreements covering two of the Consolidated Vultee plants (Nashville and Vultee Field) and the Brewster Aeronautical Corporation, the management is to fill vacancies among the supervisory staff by selecting eligible senior employees from the regular working force; however, a senior employee who is promoted to a supervisory job must undergo a trial period. Two others state that management is to give "due consideration" to seniority in filling such positions. In the sixth agreement promotions to supervisory positions are "based on departmental seniority, when, in the company's sole judgment and opinion, the efficiency, ability to perform the work and other personal qualifications of the senior employee are equal to the junior employee considered for the job."

About half the agreements include clauses protecting the seniority rights of workers promoted to the supervisory force. These clauses generally state that workers advanced to supervisory positions accumulate seniority which they may apply to their old jobs in the event of lay-off or demotion.

## *Adjustment of Disputes*

All but 1 of the 26 agreements establish formal machinery for the adjustment of disputes, and 21 provide for their final settlement through arbitration. In most of the agreements the word "grievance" is defined only in general terms, with the provision that any dispute arising out of the interpretation or application of the agreement may be submitted to the grievance machinery.

*Grievance machinery.*—Fifteen agreements grant the employee the option of presenting grievances to the foreman alone or of being accompanied or represented by his shop steward or other designated union official. An employee must consult with his foreman before taking his grievance to the union under three agreements; in three others the union steward alone presents grievances to the foreman, and four specify that an aggrieved employee must accompany his union representative when presenting a grievance to his foreman.

If grievances are not adjusted satisfactorily with the foreman, the agreements generally permit the chief steward and then the plant grievance committee to discuss the grievance with higher company officials. If the plant grievance committee and management representatives fail to settle the dispute, the union may usually call upon an outside representative, frequently an official or employee of the International union, who attempts to adjust the difference in conference with top representatives of the company.

To avoid prolonged delay in the disposition of disputes, more than two-thirds of the agreements impose time limits on the operation of the grievance machinery and many provide for frequent (usually weekly) regular meetings between the plant grievance committee and management.

*Payment for time spent in adjusting grievances.*—Shop stewards receive pay for all time spent in adjusting grievances during working hours under a large majority of the agreements, but most of these state that union and management will cooperate to keep this time down to a minimum. Generally, too, these agreements state that the steward must receive permission from his foreman before leaving his job to adjust a grievance.

Several additional agreements provide such compensation only for a specified length of time each day (from half an hour to 5 hours, varying with the individual agreement), after which the company is not required to pay the steward for time lost from work. (It has not been possible to determine whether or not stewards are compensated for time spent in adjusting grievances under a few of the 26 agreements, but none specifically says that grievance work shall be done entirely on the employee's own time.)

Thirteen of the twenty agreements which provide for regular grievance meetings indicated that such meetings are to be held during regular working hours, with shop stewards being paid for time spent in attendance at them. One of the thirteen limits this compensation to 4 hours' pay, another sets a maximum of 3 hours' pay for regular meetings, but the other eleven establish no such limits.

A few of the agreements which compensate stewards for all time lost from work in adjusting grievances include additional pay clauses covering other aspects of union adjustment activity. The Ford Willow Run agreement states that the union's building chairman "shall devote his full time to his duties as such." This chairman is

to receive the same wage he was earning on the job he held prior to assuming the chairmanship, and he is also granted "the benefit of any raises which may thereafter be given to those employed on such jobs." The Fairchild agreement provides that "second and third shift * * * grievances which are unsettled shall be taken up on the day shift with the superintendent. The committeemen on the second and third shift, as the case may be, shall participate in the conference and shall be allowed up to an additional hour with pay on the day shift to dispose of the grievance." Under the Brewster agreement, members of the contract negotiating committee are compensated for time lost from work which is "spent by them in negotiating the agreement with the company."

### ARBITRATION

When negotiations between the highest union and company officials fail to result in a settlement, arbitration by an impartial individual or agency is provided in 21 agreements including about three-fourths of the workers covered by all the agreements. All of these stipulate that unsettled disputes arising under the terms of the agreements are to be submitted to arbitration at the request of either party; however, 8 agreements, including the four Curtiss-Wright plants, explicitly exclude general wage changes from arbitration. Most of the agreements which include maintenance-of-membership clauses state that any dispute arising under this particular provision not settled under the grievance machinery is to be referred to an arbitrator appointed by the National War Labor Board.

Among the five agreements which fail to provide for arbitration is one covering the Lockheed plant, the parties to which resort to the services of the U. S. Department of Labor Conciliation Service if they cannot settle a dispute through the regular grievance machinery.[13] Another of the five, Chance-Vought, states that grievances not settled under the established machinery are to be "referred to the National War Labor Board for its determination."

Of the agreements which provide for arbitration, 14 state that the arbitrator or arbitration board is to be chosen at the time of the dispute. Most of these provide for a 3-man arbitration board composed of 1 member chosen by each of the parties, with the 2 so selected to choose a third arbitrator. In the event of failure of the parties to agree on the selection of a third man, the agreements generally refer this choice to a designated public agency. The agencies most frequently named are the U. S. Conciliation Service and the National War Labor Board.

The Ryan Aeronautical agreement has a somewhat unusual arbitration procedure: although a conciliator of the U. S. Department of Labor is established as an umpire to whom the parties submit their unsettled disputes, either party may appeal his decision to a five-man arbitration board composed of two representatives from each side, with the fifth man to be chosen with the assistance of the presiding judge of the U. S. District Court, Southern District of California.

Six agreements provide for a permanent referee, selected and compensated by both parties, to whom unsettled grievances are referred for final decision.

[13] In July 1944, the union negotiating committee and the management of Lockheed-Vega agreed upon a new contract which, among other things, includes a provision for arbitration.

### *Discharges*

Although the large majority of agreements state that workers may be discharged for "just" or "proper" cause, a few include detailed lists of reasons justifying discharges. Typical of those giving specific causes is the Cessna agreement, which states that workers may be discharged for "insubordination, intoxication, or being under the influence of intoxicating liquor while on duty, gross inefficiency, breach of trust, including commission or concealment of errors, sabotage, and excessive absences."

Appeal of discharges is specifically provided in 20 agreements, and under the other 6 it can be assumed that discharge cases may be submitted to the regular grievance machinery. The union is expressly granted the right to submit the cases of discharged workers under the regular grievance procedure in 16 agreements, and some specify that if the employee's discharge is found to be unjust, he is to be reinstated with compensation for time lost. Five of the sixteen permit the discharged employee to present his case to his union committeeman before leaving the plant. Discharge complaints must be presented to the company within a few days after an employee's discharge and are to be disposed of within a specified period unless, as is provided in some cases, management and union cannot reach an agreement and decide to submit the case to arbitration.

Four additional agreements, covering the Beech, Bell, Brewster, and Fairchild plants, provide that before any employee may be discharged the company must give advance notice to the union. The Beech agreement denies this right of advance notice in cases of flagrant violation of company rules (as intoxication or breach of trust); but in the event such notice of dismissal or suspension is given "the employees shall have the right to immediately, and must within 3 days, demand in writing an investigation. Prior to the time of the investigation, the employee and the union committee shall be advised of the charges against him and he shall be given an opportunity to obtain the presence of witnesses, if desired. * * * All investigations shall be held during regular working hours when possible and without loss of time to the employee or his committee."

The Brewster agreement requires "mutual agreement between management and the shop committee for the effectuation" of any discharge. If the parties fail to agree, the employee is suspended while the case is submitted to arbitration. If the arbitrator upholds the employee, he is reinstated with back pay to cover the period of his suspension. In the event that the arbitrator fails to make a decision within 2 weeks from the date of suspension, the employee is to be reinstated, "and shall remain on the pay roll until the determination of the arbitrator is rendered."

Under the Fairchild agreement the company is to give 24 hours' written notice to the union plant committee before discharging any employee "for cause," unless circumstances necessitate the "immediate removal" of the employee from the premises. Whenever the Bell Aircraft Corporation contemplates disciplining any employee, the agreement states that "before such action is taken * * * the matter will be a subject for discussion between the company and the union."

### *Strikes and Lockouts*

Restrictions on strikes or lockouts are found in 24 of the 26 agreements. Eighteen, all but one of which include arbitration machinery, prohibit work stoppages altogether while the agreements are in effect. Two others which establish permanent arbitrators forbid strikes or lockouts in any case where the umpire is empowered to rule.

The Republic and Curtiss-Wright (Columbus plant) agreements, which provide for arbitration of unsettled disputes, nevertheless do not ban stoppages entirely. Under the latter the union agrees to forego strikes "so long as the employer shall live up to this agreement." According to the Republic agreement before either the union or management may cause a work stoppage they must resort to all steps in the grievance procedure, and then give 10 days' notice; in addition, the union may strike only after a "majority of the employees * * * have voted such action by secret ballot conducted under the direction of an authorized Governmental agency."

The Goodyear agreement which does not include arbitration, forbids stoppages pending resort to all stages of the grievance machinery. In addition, the union at Goodyear must give 5 days' notice before resorting to a strike.

## Government Railways Industrial Tribunal in New Zealand [13]

AN amendment of April 4, 1944, to the New Zealand Government Railways Act provided for the establishment of a Government Railways Industrial Tribunal,[14] effective January 1, 1945. The legislation is the outcome of several months' negotiations between the Government and the four service organizations—the Amalgamated Society of Railway Servants; the Engine-drivers, Firemen, and Cleaners' Association; the New Zealand Railway Officers' Institute; and the New Zealand Railway Tradesmen's Association. The Tribunal is to be composed of one representative of the Railways Department, one representative of the railwaymen's organizations, and an independent chairman. The term of office was set at 3 years. The Tribunal will hear and settle cases brought by the four unions or by the management of the railways. Its jurisdiction includes the prescribing of scales of salaries, minimum rates of pay, and remuneration and conditions of overtime, night work, Sunday and holiday work, and special duty; establishment of ordinary hours of work; provision for intervals between shifts and for meals; establishment of conditions for holidays; and regulation of the granting of allowances. Orders of the Tribunal are "binding on the Crown and on every employee whom the order purports to affect, whether or not any such employee is a member of any service organizations." No appeal from the Tribunal's orders is permitted, and they may not be questioned in court. All decisions of the Tribunal are subject to the existing stabilization regulations, and general orders issued under those regulations by the Arbitration Court increasing or reducing wages are to apply to the railwaymen also.

[13] Data are from report by Carl E. Christopherson, second secretary, United States Legation, Wellington, May 17, 1944 (No. 121).

[14] In 1941, 3,570 miles of railways were Government owned and 192 miles were privately owned.

# *Industrial Disputes*

## Strikes in June 1944

THERE were 500 strikes in June 1944, involving 155,000 workers and 680,000 man-days of idleness, according to the Bureau's preliminary estimates.

Strike activity in June was substantially less than in May, the reductions amounting to 18 percent in number of strikes, 47 percent in number of workers involved, and 51 percent in the amount of idleness during strikes. Idleness in June was 0.09 percent of the available working time, as compared with 0.19 percent in May.

There were numerous small and short strikes during June, but the amount of resulting idleness was comparatively small. The number of strikes was greater than in June of any preceding year since 1937. However, the ratio of strike idleness to available working time was the same as in June 1942 and smaller than in June of any other year back to 1937.

All figures in the table below exclude strikes lasting less than 1 day (or shift) and those involving fewer than six workers.

*Strikes in June 1944, With Comparative Figures for Earlier Periods*

| Month | Strikes beginning in month | | Man-days idle during month (all strikes) | |
|---|---|---|---|---|
| | Number | Workers involved | Number | Percent of available working time |
| June 1944 [1] | 500 | 155,000 | 680,000 | 0.09 |
| May 1944 [1] | 610 | 290,000 | 1,400,000 | .19 |
| June 1943 | 433 | 186,677 | 4,698,796 | .62 |
| June 1942 | 345 | 109,611 | 586,408 | .09 |
| June 1941 | 357 | 142,689 | 1,504,056 | .24 |
| June 1940 | 214 | 38,542 | 484,007 | .10 |
| June 1939 | 245 | 62,534 | 958,127 | .17 |

[1] Preliminary estimates.

The largest strikes in June, in terms of numbers of workers involved, occurred at the Timken Roller Bearing Co., Canton, Ohio, and the Wright Aeronautical Corporation, Lockland, Ohio. Each involved about 10,000 workers.

The Timken strike, the second at that plant in June, was in protest against what local union leaders termed "a complete break-down in labor relations." The union claimed that grievance machinery provided in the 1943 agreement and extended in December 1943 was not being used, and demanded that the National War Labor Board appoint a permanent arbitrator to supplant the arbitrator provided for

in the grievance procedure. Immediately after the first June strike, the dispute was certified to the Fifth Regional War Labor Board. When the second strike occurred, the National Board assumed jurisdiction. On July 12 the Board directed that an arbitrator be designated for a 3-month period to hear grievances which reach that stage under the contract, during which time a special representative of the Board would act as observer of employer-employee negotiations, and the union would be obligated to utilize fully the grievance procedure provided in the contract without interruption of production. At the end of the 3-month period the arbitrator and representative are to report to the Board, making suggestions for improving the grievance procedure, and the Board will then take other appropriate action.

A strike, started by a comparatively small group of workers, protesting the transfer of 7 Negroes to a department formerly manned entirely by white workers, resulted in 4 days of idleness for approximately 10,000 workers at the Wright Aeronautical Corporation. Officials of the U. A. W. (C. I. O.) stated that the strike was unauthorized and contrary to the union's known position on racial equality. There were charges also that the strike had been instigated by organizers for District 50 of the United Mine Workers of America. On June 7 the dispute was certified to the National War Labor Board after efforts of union and company officials and the U. S. Conciliation Service were unsuccessful in ending the strike. The Board immediately ordered the men back to work and company officials, backed by a statement of union officers, set June 9 as the deadline after which those who had not returned would be discharged. Many workers returned on June 8, some of them working into a second shift in an effort to make up lost production, and on June 9 officers of the Army Air Forces stated that the strike was over. The company began replacing several hundred workers who had not returned before the deadline, and an appeals committee was created to consider questioned discharges.

The Timken and Wright strikes together accounted for about 55,000 man-days of idleness in June. About 65,000 man-days of idleness in June resulted from a strike of about 5,000 Florida fishermen, members of the Gulf Coast Fishermen's Union (A. F. of L.). It began on June 16 and continued until July 9. The major point in dispute was refusal of several large wholesale dealers to sign a master contract setting minimum prices for fish. Union officials also held that the dealers had refused to recognize the union as a bargaining agency. The men went back to work after many of the dealers accepted the contract or gave written guaranties that they would pay requested prices, pending designation of a bargaining agency by the National Labor Relations Board.

A strike of about 2,500 glove workers at several plants in Gloversville, N. Y., caused about 20,000 man-days of idleness. The workers struck in protest against a War Labor Board denial of a wage increase. A strike of brewery workers in New Jersey over demands for a guaranteed 40-hour week accounted for another 20,000 man-days of idleness. Two strikes, one at the St. Clair Coal Co. (St. Clair, Pa.) over payments for contract miners and one at the Todd Galveston Dry Docks (Galveston, Tex.) over demand for a closed shop, each caused more than 10,000 man-days of idleness.

# *Labor Laws and Decisions*

## State Labor Legislation in 1944[1]

### *Summary*

IN 1944, regular sessions of legislatures were held in only 8 States,[2] and in one of these, Mississippi, no labor laws were enacted. Special sessions were held in 31 States, but these States considered almost exclusively soldier voting and other subjects not directly of interest to labor. The Legislatures of Alaska and Hawaii were not in session, and in Puerto Rico no labor laws were enacted.

Most of the labor legislation in 1944 was in the field of workmen's compensation. Numerous amendments to the New York law were adopted, some of them being the result of the Moreland Act investigation of the administrative practices under the law. In Virginia a new occupational-disease law was passed, and in Kentucky and New Jersey legislation relating to silicosis and asbestosis was enacted.

Legislation relating to child labor was passed in Louisiana and New York. This legislation continues the trend of the last 2 years, the purpose of which has been to make more children available for the demands of the war emergency. Similarly, in Virginia a new law permits women to work longer hours in any employment essential to the war.

The most important legislation relating to wages was enacted in New York, where the principle of equal pay for equal work was established by two laws. The first of these prohibits discrimination in the rate of pay because of sex, and the other extends the benefits of the minimum-wage law to men.

In the field of industrial relations the only 1944 legislation occurred in New York, establishing a school of industrial and labor relations, the first of its kind in the country.

### *Child Labor*

Only three States legislated on the subject of child labor during the year. In Kentucky children under 16 are now permitted, on Saturdays, to work more than 8 hours a day and after 6 p. m. In Louisiana the law permitting the relaxation of standards was amended. Under the original law, relaxation of standards for the employment of minors under 18 was not permitted, but as a result of the 1944 legislation the age limit was reduced to 16.

In New York several laws were enacted permitting minors to work on farms. The act authorizing the commissioner of education to

[1] Prepared in the Division of Labor Standards, of the Department of Labor, by Alfred Acee.
[2] Kentucky, Louisiana, Mississippi, New Jersey, New York, Rhode Island, South Carolina, and Virginia.



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release from school, for a period of 30 days during the school year, pupils 14 years and over for farm work, and pupils 16 years or over for work in canneries and greenhouses, was extended to July 1, 1945. Another law permits children 14 years of age and over to be employed as caddies, when attendance is not required at school, without obtaining an employment certificate. Provision is also made for a "farm work permit" to be issued for employment in farm service to a minor 14 or 15 years of age, in the same manner as a standard employment certificate, except that no literacy tests, school records, or promises of employment are required.

### *Hours of Labor*

As an emergency measure, Virginia changed its hours-of-labor law in order to permit women to work 10 hours per day and 52 hours per week (instead of 8 per day and 48 per week) in any employment essential to the prosecution of the war as defined by the War Manpower Commission or other Federal agency authorized to designate essential activities. The provisions of this act, however, do not prevent the commissioner of labor from granting permits under the relaxation law, passed in 1942, which allows weekly hours up to 56 on a permit. This act is to terminate on March 3, 1946, or when the war emergency is over, whichever occurs first.

At a special session held in Oklahoma the legislature suspended, until the termination of the present World War, the prohibition against labor on Sunday as far as applicable to the manufacture of war materials. The act is made retroactive to December 8, 1941. On the other hand, in Kentucky a 1943 law which suspended during the war the observance of all holidays except Independence Day, Labor Day, and Christmas was repealed.

### *Wages of Labor*

The New York minimum-wage law was amended to make it applicable to adult males as well as to women and children. The amendment prohibits the employment of such employees at less than the rate applicable for women or minors under a mandatory minimum-wage order. Another law in that State prohibits discrimination in rates of pay because of sex. However, the law does not apply to domestic servants, farm employees, and employees of religious, charitable, scientific, literary or educational organizations.

In Kentucky all employers of 10 or more persons are now required to furnish their employees, at the time of payment of wages, itemized statements of any deductions.

### *Discrimination and Preference*

In New York a temporary commission of 23 members, including 8 members of the legislature, was appointed to study practices of discrimination against any inhabitant of the State because of race, creed, color, or national origin, and to make recommendations designed to eliminate such discrimination.

In Virginia the legislature declared it to be the policy of the State, in contracting for buildings and improvements, to award contracts to

Virginia architects, engineers, and contractors, and to give preference in employment to residents of Virginia.

## *Workmen's Compensation*

Outstanding progress in workmen's compensation was made this year in Kentucky, New Jersey, New York, and Virginia. In Kentucky the silicosis provisions of the present act were extended to all industries. In New Jersey silicosis and asbestosis were added to the list of compensable occupational diseases.

Many changes were made in the New York law, mostly aimed at strengthening the medical and administrative provisions of the law. In Virginia an occupational-disease law was enacted, bringing to 28 the number of States now having occupational-disease coverage.[3]

### KENTUCKY

In this State the original law covered silicosis in only a few specified industries. The 1944 amendment extended silicosis provisions to all industries, but continued the requirement of the original law that both the employer and the employee must voluntarily agree to come under the act. The amended act provides for the appointment of a medical committee to which claims for compensation for disability or death from silicosis must be referred.

### LOUISIANA

The maximum benefits for medical, surgical, and hospital services which the employer is required to furnish were increased from $250 to $500, and the maximum amount which the employer must pay for burial expenses was increased from $100 to $250.

### NEW JERSEY

A new law was passed in New Jersey, providing compensation for silicosis and asbestosis. The workmen's compensation act covers 12 specified diseases but does not include these two. Under the 1944 enactment the same benefits are payable as for an injury resulting from an accident, except that in the first month in which the act becomes effective (January 1945) the maximum award for silicosis and asbestosis is $1,000; the amount that can be awarded increases $50 for each month thereafter until the total compensation payable equals the amount payable for an industrial accident. The law covers only diseases which an employee contracts subsequent to January 1, 1945, and provides that an employer shall not be liable for compensation unless total disability or death results within 3 years after the last injurious exposure, or unless death follows a period of continuous total disability. Compensation is not payable for partial disability.

### NEW YORK

As an emergency measure, maximum weekly benefits for permanent or temporary total disability were increased from $25 to $28 for the year beginning June 1, 1944. The industrial board has held that this

[3] For detailed analysis of this law, see the Monthly Labor Review, May 1944 (p. 1020).

increase is retroactive and applies to all cases of total disability, either temporary or permanent, after June 1, 1944. Another amendment increased the minimum compensation for temporary total disability from $8 per week (or full wages if less than $8) to $12 per week (or full wages if less than $12). Employers are also made liable for such replacements or repairs of artificial members, devices, or appliances as are necessitated by ordinary wear. In the case of silicosis, the total amount allowed as compensation for permanent total disability was increased from $5,000 to $6,500.

The other amendments adopted in New York strengthened the administration of the law, particularly with reference to medical service. Several are aimed directly at "medical racketeering" by unethical physicians.

Two amendments penalize employers or insurance carriers for delaying settlement of claims. One of these provides that if the industrial board finds that objections to an award were made without just cause, the employer or carrier must pay an additional sum, not in excess of 15 percent of the award. The other provides that if the carrier or employer appeals a decision, later unanimously upheld by the court, the award must be increased by 10 percent, but not less than $100.

Another amendment provides that the right to recommend authorization of physicians, medical bureaus, and laboratories to treat claimants, in counties of over 1,000,000 population, shall be vested in a committee of 3 physicians for each county to be selected by the industrial commissioner. In the other counties such recommendations are to be made by the county medical societies. Claims for services in connection with X-ray examination, diagnosis, or treatment are valid only when made by a physician authorized as a roentgenologist. In addition, failure to submit reports directly to the commissioner, participation in fee splitting, and refusal to answer questions in certain cases are grounds for revocation of license.

The requirement that the industrial commissioner shall select expert physicians from panels submitted by county medical societies for opinions as to injuries to claimants is eliminated, and the industrial commissioner is authorized to employ physicians as committees of expert consultants in essential fields. Cases involving arbitration of medical bills hereafter will be referred to the medical-practice committee in counties with over 1,000,000 population, and in other counties to an arbitration committee composed of 2 physicians designated by the county medical society, 2 by the employer or carrier, and 1 by the industrial commissioner.

Physicians selected by the employer, the carrier, or the employee are forbidden to be present at physical examinations of claimants required by the industrial commissioner or the industrial board, but examination by the carrier's and employer's physicians may be made immediately thereafter in the presence of the claimant's physician. A copy of the report by an insurance carrier's physician on his examination of a claimant must be filed with the commissioner within 10 days.

No claims for medical or surgical treatment will be enforceable unless the physician submits his reports directly to the industrial commissioner within 48 hours, and the commissioner is required to remove from the list of authorized physicians anyone who has failed

to submit full and truthful medical reports to the commissioner or industrial board, except in the case of minor injuries. A person who interferes with the selection by an injured employee of an authorized physician to treat him, or who improperly influences or attempts to influence the medical opinion of a physician, is guilty of a misdemeanor.

The number of members of the industrial board has been increased from 5 to 10, and 3 of the members must be attorneys, who are not permitted to engage in the practice of law. The industrial commissioner is to act as chairman of the board but has no vote except in the case of a tie. The commissioner is no longer authorized to act as a referee to hear and determine compensation cases. Another provision requires the industrial board to have tests of character and fitness for applicants for licenses to represent claimants, and the industrial commissioner is authorized to prohibit the appearance, for cause, of regular employees of self-insured employers and insurance carriers.

Membership of the industrial council was reduced from 15 to 9—3 representing the interests of employees, 3 those of employers, and 3 to be licensed physicians. Per diem fees are $25, not to exceed $1,000 a year for lay members and $2,500 a year for physicians. The amendment makes it clear that an employee injured by the negligence of a third party may take medical benefits as well as compensation from his employer, even though he sues the third party for damages. Another amendment makes the employer liable for the food, clothing, and maintenance furnished to injured employees in institutions operated by the State. By court decision, the employer and carrier were previously liable only for medical care and treatment.

Referees are now permitted to hear and determine cases regarding neck disfigurement as well as facial disfigurement. Previously, referees had the power to make the awards for facial disfigurement but only the board had the power to make an award for neck disfigurement. If an employee who is permanently partially disabled incurs an injury or an occupational disease resulting in additional permanent partial disability, he is entitled to receive compensation on the basis of his combined disabilities, but the employer is liable only for the disability resulting from the subsequent injury or occupational disease. The special second-injury fund is liable for the payment of excess costs for both injuries combined. In case of death, if it is determined that the death probably would not have occurred except for the preexisting disability, the employer is liable for funeral expenses and for 2 years' death benefits, and the special fund is liable for the death benefits thereafter.

The superintendent of insurance is authorized to fine any insurer up to $2,500 if he finds that the insurer has unreasonably failed to comply with the requirements of the workmen's compensation law.

### SOUTH CAROLINA

Under an amendment adopted in South Carolina, when compensation is payable to "next of kin," it is not necessary to prove dependency. The term "next of kin," is defined to include child, brother, or sister, irrespective of age or marital status. Another amendment increases from $25 to $40 per week the amount deemed to be the average weekly wage for the purpose of computing compensation of the employees of the South Carolina defense force. A senate resolution was adopted,

providing for a committee of three senators to make a complete investigation as to the rates charged employers for insurance under the workmen's compensation law.

### VIRGINIA

By an amendment to the workmen's compensation act, provision is now made for compensation for disability or death from 46 specified occupational diseases and poisonings. In addition, the act permits an employer, if he desires to do so, to supply general occupational-disease coverage for his employees. Another amendment provides that parents in destitute circumstances are presumed to be wholly dependent for support upon the deceased worker, making it unnecessary to prove dependency in order to get compensation benefits.

## Executive Order 9240 in Relation to Wage Stabilization

By I. Robert Feinberg and Arthur H. Dadian [1]

EXECUTIVE Order 9240 provides that on all work relating to the prosecution of the war no premium wage or extra compensation shall be paid for work on Saturday or Sunday, as such; that time and a half is permitted but not required for work performed on the sixth day worked in the regularly scheduled workweek, or for work over 40 hours per week, or 8 hours per day, where otherwise required by law or contract; that double time must be paid for work on the seventh day worked in the regularly scheduled workweek; and that time and a half, but no more, must be paid for work on the six designated holidays, premium pay or extra compensation being prohibited for any other holidays.

The order was signed by the President on September 9, 1942, and became effective on October 1, 1942.[2] The Secretary of Labor has stated that it was designed to facilitate round-the-clock war production, to discourage absenteeism resulting from the payment of premium rates for work on particular days, as such, and to increase the efficiency of workers by encouraging a day of rest in each workweek. Executive Order 9250, the key to the wage-stabilization program, was promulgated under the authority of the Anti-Inflation Act of October 2, 1942, and took effect on October 3, 1942. It prohibits all increases, or decreases, in wage and salary [3] rates, without the approval of the National War Labor Board or the Commissioner of Internal Revenue. Both orders deal with wages; their interrelation necessarily resulted in the evolution of principles and policies peculiar to the subjects common to both.

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[1] Mr. Feinberg is Assistant General Counsel of the National War Labor Board and representative on the Joint Committee on Executive Order 9240, and Mr. Dadian is Senior Attorney of the National War Labor Board.

[2] Jurisdiction to administer and interpret, as well as to issue exemptions from, the Executive order has been vested in the Secretary of Labor. This discussion does not deal with the interpretations of the order which have been issued by the Secretary; only those interpretations are referred to which are necessary to an understanding of the manner in which the order affects the wage-stabilization program. For interpretations by the Secretary of Labor, see Interpretative Bulletin No. 1 of Executive Order 9240, issued by the Secretary of Labor.

[3] Executive Order 9250 did not cover increases in salaries up to $5,000 per year. Jurisdiction over increases in salaries above $5,000 per year was vested in the Director of Economic Stabilization who subsequently, on October 27, 1942, with the approval of the President, vested authority over such increase in the Commissioner of Internal Revenue. These distinctions are, however, disregarded for the purpose of this discussion.

Executive Order 9240 applies only to work relating to the prosecution of the war. Its coverage is, therefore, less broad than that of the wage-stabilization program. In addition, by express interpretation of the Secretary of Labor, the order does not extend to enterprises which provide public transportation or communication facilities; storage, distribution, or warehousing facilities; newspapers, magazines, and other periodicals which disseminate general information to the public at large; public-utility companies which merely furnish power and other facilities to the general public; agricultural workers; or employees of Federal and State Governments and their political subdivisions. Also, the order does not affect existing statutes, such as the Fair Labor Standards Act and the Walsh-Healey Act.

### *Sixth and Seventh Days of Work*

Under Executive Order 9240 time and a half may be paid for work on the sixth day of work and double time must be paid on the seventh day of work, if the sixth and seventh day of work fall within the regularly scheduled workweek of the employee. Six or seven days of successive work are not sufficient, if they do not fall within the same established workweek. The 6 days of work may be any 6 in the workweek and need not be successive. As interpreted by the Secretary, a workweek consists of 7 successive days starting on the same calendar day each week.

In computing the sixth and seventh days of work for premium-pay purposes, the order has been interpreted more rigidly as regards absences in the case of the seventh day than of the sixth day. In computing the seventh day of work in the workweek, a day upon which no work is performed is not counted as a day worked unless (1) that day is one of the six holidays designated in the order, or (2) the employee reports for work with reasonable expectation of work and is sent home because of lack of work or other reasons beyond his control. A workday upon which the employee is absent for a part of the day must be counted as a day worked in computing the seventh day, if the absence is justifiable; if the absence is not justifiable, the day may not be counted as a day worked unless the employee makes up the time lost. In computing the sixth day of work, absence for all or part of a day may or may not be counted as a day worked, depending on the reason for the absence and the prevailing practice or agreement in the plant. Where an employer prior to October 3, 1942, paid premium wages for work on the sixth day of the workweek and did not count certain absences as days of work for that purpose, a liberalization of that practice constitutes a wage adjustment requiring Board approval.

It has been the position of the National War Labor Board that overtime or premium payments which are required by the provisions of a Federal statute or Executive order do not require the approval of the National War Labor Board under the wage-stabilization program, notwithstanding the fact that such overtime or premium payment may represent a change in an employer's practice from that existing prior to October 3, 1942.[4] For this reason the payment of

[4] Section 1 of Title VI of Executive Order 9250 provides: "Nothing in this order shall be construed as affecting the present operation of the Fair Labor Standards Act, the National Labor Relations Act, the Walsh-Healey Act, the Davis-Bacon Act, or the adjustment procedure of the Railway Labor Act."

double time required by Executive Order 9240 for work performed on the seventh day of work in the regularly scheduled workweek does not require Board approval. Since, however, Executive Order 9240 does not require, but merely permits, the payment of time and a half for work on the sixth day of work in the regularly scheduled workweek, originally such payments could not have been instituted without Board approval. On May 27, 1943, the National War Labor Board adopted a resolution to the effect that where, prior to October 1, 1942, a premium or extra rate was regularly paid for Saturday work, as such, either because of a collective agreement or because of prior custom or practice, time and a half, but no more, may be paid for work on the sixth day of work in a regularly scheduled workweek without the approval of the Board. Where an employer who paid premium wages for work on Saturday, as such, converts to the sixth-day practice, Board approval is not required for the adoption of the practices approved by the Secretary relating to counting absences as days worked, since obviously no wage increase results.

### *Holidays*

When work is performed on the six designated holidays, time and a half, but no more, must be paid. The six designated holidays are New Year's Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day, and either Memorial Day or one other such holiday of greater local importance. Premium pay is not permitted under Executive Order 9240 for work on any other holiday as such. The order does not prohibit the payment of straight time for holidays on which no work is performed.

As the provision in Executive Order 9240 with regard to holiday pay is mandatory, compliance with the order does not constitute a wage or salary adjustment requiring Board approval under the wage-stabilization program. Since the order contains no mandatory requirement with regard to pay for holidays on which no work is performed, all such adjustments in an employer's practice since October 3, 1942, do require Board approval. Approval is granted only if such pay is in accord with the prevailing practice in the industry and area.

### *Joint Committee on Executive Order 9240*

The Secretary of Labor has ruled that Executive Order 9240 prohibits premium pay for work on Saturday, Sunday, or particular days as such, but does not prohibit the payment or limit the amount of extra compensation for work on those days for other reasons (such as onerous work, emergency work, perfect attendance, irregular work schedule) or extra compensation which is really an integral part of the agreed wages for the job.

The issuance of Executive Order 9240 was followed by many applications filed by employers and labor unions with the National War Labor Board for permission to increase wage rates to compensate employees for the loss in earnings resulting from the operation of the order, especially in those cases in which employees regularly worked on Saturdays or Sundays and received premium pay for work on those days.

These requests came under the jurisdiction of the Secretary of Labor (under Executive Order 9240), and the National War Labor Board (under Executive Order 9250). To handle these joint problems, therefore, a Joint Committee made up of a representative of the National War Labor Board and a representative of the Secretary of Labor was appointed on January 26, 1943.[5]

It became the duty of this Committee to study the cases coming before the Board, involving Executive Order 9240, and to make a report and recommendation in each case to the National War Labor Board or its agents. All applications, whether before the Regional War Labor Boards or the National War Labor Board, for the approval of wage or salary adjustments under Executive Order 9240, are submitted to this Joint Committee. The Joint Committee makes a report and recommendation to the National Board in all such cases.[6]

## *Adjustment to Compensate for Loss of Premium Pay*

As already stated, Executive Order 9240 does not prohibit the restoration of the amount of premium pay lost in cases in which the premium pay constituted an integral part of the agreed wages for the job and was not, therefore, merely extra compensation for work on certain days as such.[7] The National War Labor Board therefore has, in such cases, adopted the policy of granting adjustments, upon the recommendation of the Joint Committee, to compensate employees for the loss in total earnings resulting from the automatic operation of the order. A large majority of the cases before the Committee—and the ones that presented the difficult problems—were these cases involving premium pay which allegedly constituted an integral part of the agreed wages for the job. When the Board restores the loss, it is generally in the form of a bonus as a percentage of the weekly earnings of the employees, rather than as an increase in their base rates. This policy was established in order to prevent the unstabilizing of industry-wide rates and to facilitate readjustments after the war.

An analysis of all cases presented to the Joint Committee and decided by the National War Labor Board indicates that certain

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[5] Robert T. Amis, Special Assistant to the Secretary of Labor, is the representative of the Secretary of Labor on the Joint Committee on Executive Order 9240; I. Robert Feinberg, Assistant General Counsel of the National War Labor Board, is the representative of the Board.

[6] The functions of the Joint Committee also included that of reviewing all cases before the Board or its agents involving an interpretation of Executive Order 9240. Since the Committee has in its reports to date covered almost all phases of the order, this latter function has recently been discontinued. The Committee continues to act in an advisory capacity on questions of interpretation.

Section 802.9 of Rules of Procedure of the National War Labor Board adopted November 26 and 27, 1943, and amended June 7, 1944, provides as follows:

SECTION 802.9 *Functions of Joint Committee.*—(a) It shall be the duty of this Committee, prior to any decision thereon, to review and to make recommendations to the Board for the disposition of all applications and dispute cases arising out of a request for a wage or salary adjustment to compensate employees for a loss in earnings caused by the operation of Executive Order 9240, as amended. All such cases shall be decided by the Board. Applications for the approval of voluntary adjustments of this type shall be forwarded by the Board agent by which they are received to the Joint Committee, after the necessary information in connection therewith has been obtained. When such an issue is involved in a dispute case pending before an agent of the Board, the entire file in the case shall, after receipt of the panel or hearing officer's report, and the comments of the parties, be forwarded by the agent to the Joint Committee, which shall present the issue to the Board, with its recommendation, for disposition. When involved in cases pending before the Board, such issue shall be submitted to the Joint Committee for a recommendation prior to final disposition thereof by the Board. Action by the Board or its agent on other issues in the case need not, in the discretion of the Board or its agent, be withheld pending action on this issue.

(b) It shall also be the duty of the Joint Committee to render assistance and advice to the Board and its agents in the determination of questions involving the application or interpretation of Executive Order 9240, as amended. The Committee may require a Board agent to submit to it for review any case involving the application or interpretation of the Executive Order, and may, in its discretion, should it decide the case raises an issue of national importance, transfer the case to the Board for disposition.

[7] This discussion applies as well to cases in which the employer paid more than time and a half for work on the six designated holidays or paid premium pay on holidays other than the six designated holidays.

elements must be present before a bonus will be approved to restore a loss which constituted an integral part of the agreed wages for an employee's job. These elements are (1) actual loss of premium pay, (2) a regular work schedule requiring Saturday or Sunday work, and (3) the intent of the parties that the premium pay constitutes an integral part of the agreed wages.

### BONUS TO COMPENSATE FOR AN ACTUAL LOSS OF PREMIUM PAY

There must be a showing that the employees involved in the case "actually suffered a loss"[8] from the operation of Executive Order 9240, and that the requested bonus is no more than the actual amount of the loss suffered by each employee. The loss may not be averaged among all employees, as in the case of the "Little Steel" formula. An adjustment in an average amount covering both those employees who have suffered a loss and those who have not, or those who suffered in varying amounts, will not be approved by the Board.[8] In the case of the Hermitage Portland Cement Co. (No. 4–3038), the Board denied an adjustment on the ground that the parties may not average the loss over the entire plant, and that to do so would be granting a wage increase to those employees in jobs which had not regularly received the premium pay.

Furthermore, the Board has held that there must be a showing that the loss of premium pay suffered by the employees resulted from the automatic operation of Executive Order 9240, and not from other causes, such as the operation of a State law requiring that employees must have 1 day off in every 7,[9] a change of operating schedule reducing the number of days,[10] or hours,[11] worked per week, or a change in the interpretation of Executive Order 9240 by the Secretary of Labor.[12]

### REGULAR WORK SCHEDULE REQUIRING SATURDAY OR SUNDAY WORK

There must be a showing that "the day for which a premium rate had been paid prior to October 1, 1942, constituted part of the regular work schedule of the employee and did not represent work beyond and in addition to his regular schedule." [13]

"The frequency of Sunday or holiday work caused by a step-up in production alone is an insufficient basis for regarding the premium pay for such work an integral part of the take-home." [13] In the Hercules Powder Co. case (No. 2–5503), the Board refused to approve a requested bonus because it found that the number of Sundays worked by employees varied among the departments and among individuals in the same department. No employees were regularly scheduled to work on Sunday, but over a period of time, they averaged a certain amount of Sunday work. In the Remington Arms Co. Inc. case (No. 13–336), the Board said that the mere fact that a shift schedule requiring regular Sunday work was in effect did not warrant the granting of a compensatory bonus if it appeared that the payment

[8] American Oil Co. (Case No. 111-215-C). See also Scott Paper Co. (Case No. 3-1305).
[9] Van Norman Machine Tool Co. (Case No. 111-1183-D).
[10] Phoenix Iron Co. (Case No. 3-3050).
[11] Curtiss-Wright Co. (Case No. 2688-D).
[12] Firestone Tire & Rubber Co. (Case No. 184), and Bristol Brass Corporation, (Case No. 1-5117).
[13] American Oil Co. (Case No. 111-215-C). See also Billings & Spencer Co. (Case No. 1-2710), Brewster Aeronautical Corporation (Case No. 111-3372-D), Brown Co. (Case No. 111-3407-D), and National Gypsum Co. (Case No. 2-2099).

of premium pay for work on Sunday to these shift workers was merely a continuation of a practice which had been instituted in normal times when Sunday work was unusual.[14]

### INTENT OF THE PARTIES

There must be a showing that the employer and the employees had *intended* that the premium pay constitute an integral part of the agreed wages for the job.

The criteria used by the Board to determine the *intent* of the parties falls into approximately eleven categories.

#### *Comparison of Base Rates of Pay in the Same Plant*

In cases in which the base rate of pay for an occupation on a regular schedule, which does not include premium days, is the same as the base rate for the same occupation on an irregular schedule, which does include premium days, the Board generally considers such premium pay to be one for work on certain days as such and, therefore, not an integral part of the agreed wages for the job.

In the A. C. Lawrence Leather Co. case (No. 1–918), the Board found that the premium pay for Sunday work did not constitute an integral part of the agreed wages for the job, since the 17 employees who regularly worked on Sunday were paid the same hourly rate as other employees in the same classification who did not work on Sunday. In the Metal and Thermit Corporation case (No. 2–20843), the Board refused to approve the requested adjustment because it found that no distinction was made between the basic rate for maintenance men who worked on Sunday and maintenance men who did not work on Sunday; and it appeared that the premium rate for Sunday was instituted as compensation for the undesirability and inconvenience of working on that day. In the DeLaval Steam Turbine Co. case (No. 3–1962), the requested bonus for those on the irregular work schedule which required work on Sundays was denied because the employees on both the rgular and the irregular schedules received the same basic hourly rate of pay.[15]

On the other hand, premium pay received by those working Saturday or Sunday is usually considered to be an integral part of the agreed wages for the job when it is shown that the employees received a lower hourly rate than employees performing the same duties, but not working on Sundays.[16] Similarly, in the Monsanto Chemical Co. case (No. 4120), the Board granted a bonus to employees on the irregular work schedule, which required work on six Sundays out of every eight, because they received lower base rates than those on the regular day schedule, and prior to Executive Order 9240 the earnings of the two groups were equalized by the Sunday overtime rates.

#### *Comparison of Company Policy in Other Departments or Plants*

In certain cases, the established policy of the company in other departments or plants was found by the Board to be significant. In denying the premium in the case of the Celanese Corporation of America (No. 13–149), the Board noted that the contract with the union provided for premium pay for work on Saturdays and Sundays

[14] See also R. C. A. Manufacturing Co. (Case No. 2-1038).
[15] See also Waterbury Clock Co. (Case No. 111-515-D).
[16] Westfield Manufacturing Co. (Case No. 1-1911).

but not for employees on continuous operations, including watchmen and tour men. The Board concluded, therefore, that it was not the original intent of the parties to have premium pay considered as part of the wage structure of employees regularly required to work on week ends. In the case of Western Electric Co., Inc. (No. 13–228), the Board approved the bonus for employees on the 5–1 work schedule because it found that it was the company policy to pay a 10-percent bonus for "7-day coverage" jobs (that is, jobs that did not operate on a normal Monday-to-Friday schedule), that the collective-bargaining negotiations indicated the 5–1 work schedule was considered a "7-day coverage" job and that the premium pay for work on Saturdays and Sundays was adopted for this 5–1 schedule upon its installation as a substitute for the 10-percent bonus.

*Comparison of Weekly Take-Home Pay With That in Plants on Regular Work Schedule*

If the premium pay for week-end work results in total take-home earnings equal to the earnings of employees performing the same work in other shops where no premium is paid, the Board has considered this fact as an indication that the premium pay was an integral part of the agreed wages for the job. In the case of Refined Syrups & Sugars, Inc. (No. 2–23536), the Board approved a bonus for stationary engineers because the rates were set at a figure to equalize the take-home pay of the company's employees with that of employees in the same classification in other establishments.

*Establishment of Premium Pay to Maintain Existing Take-Home Earnings*

The Board has approved the restoration of the amount of the premium lost if it was established to maintain the take-home pay after a change in work schedules at the plant. In the case of Hartford Special Machinery Co. (No. 1–1237), the plant worked a 7-day, 56-hour week. Following a ruling of the State Labor Department, the workweek was reduced to 6 days. At that time the company established a schedule of 56 hours in 6 days for the employees in question, to prevent any loss in take-home pay. On the basis of these facts the Board approved the payment of the requested bonus. In the case of Cone Automatic Machine Co., Inc. (No. 4343), the Board approved the bonus because it found that the weekly pay for the new schedule, which included double time for Sunday, amounted to approximately the same sum as had been received by the employees for a basic week on the old schedule.[17]

*Maintenance of Existing Intraplant Relationships*

The Board attempts to remedy intraplant inequalities resulting from the operation of the Executive Order 9240. In the case of American Hide & Leather Co. (No. 1–841), two employees in the tanning room had been on a Sunday-through-Friday-noon weekly schedule for 5 years and had received double time for Sunday work. Sunday work in the case of these employees was a necessary part of the operations of the plant. The company showed that the elimination of double time for Sunday work in the case of these two workers had created an intraplant inequity, and the Board approved the payment of a weekly bonus to these employees to compensate them for this loss.

[17] See also Willamette Hyster Co. (Case No. 13–198).

*Union Acceptance of Premium Pay in Lieu of Established Rate*

The Board has approved the bonus in cases in which the union had permitted the employer with an irregular work schedule, which required Saturday or Sunday work at premium rate, to pay a lower hourly base rate than that paid by other union shops on a regular work schedule. In the case of Hiram Walker & Sons, Inc. (No. 6–1004), the Board approved a bonus, where the facts indicated that the union had accepted a lower hourly rate than that paid in other plants to engineers who did not work on Sunday.

*Union Acceptance of Premium Pay in Lieu of Higher Base Rate*

If the union has accepted premium pay for week-end work in lieu of an increase in base rates, the Board considers this fact as an indication that the premium pay was intended to be an integral part of the agreed wages for the job. In the case of the Diehl Mfg. Co. (No. BWA–61), the Board approved the requested bonus on the finding that at the time of the installation of the irregular work schedule negotiations were held with the union, during which the union agreed to accept the premium rate in lieu of an additional wage increase. This fact, together with the fact that payment of the premium rate and the operation of the irregular shift had been in effect for a considerable period of time, justified the conclusion that the premium wages constituted part of the agreed compensation for the job. In the Harshaw Chemical Co. case (No. 5–4034), the Board approved the bonus because it found that it had been the policy of the company to pay 5 cents per hour premium for all hours worked on the shifts in question, which continued until July 1, 1942, when the agreement was amended to eliminate the 5-cent premium and to substitute in lieu thereof payment of time and a half for all Saturday and Sunday work.

*Simultaneous Institution of Work Schedule and Premium Pay*

If the work schedule involving Saturday or Sunday work and the premium pay for work on those days were instituted at the same time, the Board will consider this fact as an indication that the premium pay constituted an integral part of the agreed wages for the job. In the case of the Fellows Gear Shaper Co. (No. 4086), the Board granted the requested bonus where the 6–2 schedule was instituted in March 1942, and coincidentally with the introduction of this shift, Sunday double time was adopted. The board granted a bonus to the employees of the Western Cartridge Co. (case No. 111–1434) because it found that at the time the schedule was introduced the company commenced paying time and a half for work on Sundays as such. In the case of the Owens-Illinois Glass Co. (No. 5–10257), the Board granted a bonus to the employees on continuous shifts because it found that at the same time that these shifts were first put into effect, in 1939, a provision was inserted in the contract between the company and the union requiring time and a half for all Sunday work.[18]

[18] See also National Mortar & Supply Co. (Case No. 5–5735), and Atlantic Manufacturing Co. (Case No. 3–5080).

*Collective-Bargaining Negotiations*

The Board gives a great deal of weight to the intent of the employers and employees as shown in the collective-bargaining negotiations which resulted in the payment of extra compensation for work on specific days. One such important consideration is the indication that during collective-bargaining negotiations the total take-home pay, including premium pay, was considered in fixing the rate for the job. In the case of Savage-Arms Corporation (No. 2–1672), the Board approved the requested bonus because the parties submitted sufficient information to indicate that the total take-home earnings, including the premium pay, were considered during the collective-bargaining negotiations. In the Willamette Hyster Co. case (No. 13–198), the Board approved a bonus because convincing evidence was submitted indicating that the take-home pay for the job was considered in the bargaining negotiations. In the case of General Mills, Inc. (No. 13–231), the Board granted the requested bonus because it found among other things that the total take-home pay, including premium for week ends, had been considered by the management in negotiations for the purpose of fixing wage rates.[19] In the case of the Flintkote Co. (No. 2–10752) the Board denied the bonus because both the company and the union stated that the total take-home pay including premium pay for week-end work had never been a consideration entering into the determination of hourly wage rates.[20] In the case of Remington Arms Co., Inc. (No. 13–336), the Board denied the bonus because the parties expressly stated that the requested bonus would be discontinued if the irregular work schedules were discontinued, thus indicating that the premium pay for Sunday work was merely extra pay for Sunday work as such.

*Execution of Union Contract With Knowledge of Pre-Existing Premium-Pay Arrangement*

The execution of the collective-bargaining agreement after the work schedule requiring week-end work with premium pay had been in effect has been considered by the Board as an indication that the premium pay constituted an integral part of the agreed wages for the particular jobs. In the case of York Safe & Lock Co. (No. 111–BWA–43), the Board granted the bonus because among other things the collective-bargaining agreement was executed after the schedules which required week-end work were in effect.[21] In the case of Westinghouse Electric Elevator Co. (No. 2–5077), the Board decided that the parties had regarded the premium pay for week-end work as an integral part of total take-home pay because the provision for premium pay was included in the collective-bargaining agreement while the irregular work schedule was in operation.

In the case of Lee Rubber & Tire Corporation (No. 5–3433), the Board approved the bonus because the workers on the irregular shift had been receiving premium pay since 1938, and several collective agreements had been negotiated and signed during this period. In the General Mills, Inc., case (No. 13–231), the Board approved the bonus because the schedules had been in effect prior to 1937, and the company had paid premium pay for week-end work since its first collective agreement in 1937. The inference was drawn, therefore,

[19] See also American Steel Foundries (Case No. 111–2048–D), Stackpole Carbon Co. (Case No. 3-7207) and Corning Glass Works (Case No. 3-799).
[20] See also Hercules Powder Co. (Case No.2–680–D).
[21] See also New Britain Machine Co. (Case No. BWA–76).

that the premium pay was taken into consideration in fixing the rate for the job.[22]

*Comparison of Existing Union Contract With Preceding Contracts in Plant*

Sometimes the Board has been able to determine the intent of the parties by comparing the terms of the existing collective-bargaining agreement with those of the preceding agreements. In the case of Vanadium Corporation of America (No. 2796–D) the Board approved the bonus because it found that, although the collective agreement of November 1940 provided that employees on the shift involved were not to receive premium pay for work on Sunday, the contract of November 1941 was amended to require such premium pay, thus indicating that it was the intent of the parties to consider this premium pay as part of the agreed compensation for shift workers.

### *Shift Bonus*

In cases in which the premium pay for Saturday and Sunday work did not in a strict sense constitute an integral part of the agreed wages for the type of work performed, but represented a reasonable and an established shift differential between the earnings of workers on the regular shift and of those on the irregular shift which included week-end work, the Board has recognized the existing shift differential and permitted it to be restored in the form of a bonus. In the case of Westinghouse Electric & Manuafcturing Co. (No. 2–13–366), the workers on the irregular 7–1 shift (7 days on, followed by a day off), which included Saturday and Sunday work, received the same base pay as those on the regular shift. The premium pay for Saturday and Sunday work, therefore, did not constitute an integral part of the wages for the particular type of work. The facts indicated, however, that prior to the issuance of Executive Order 9240 the company recognized the premium pay for week-end work as a shift differential based on the personal inconvenience suffered by these employees in working 7 consecutive days and rotating their day of rest. The Board, therefore, authorized the bonus to restore this established shift differential.[23]

## Recent Decisions of Interest to Labor[24]

### *Labor Relations and Industrial Disputes*

*APPLICABILITY of constitutional privilege against self-incrimination to union records.*—A Pennsylvania grand jury issued a subpena for the production of the records of Local No. 542 of the International Union of Operating Engineers. The union's officer refused to produce the records, claiming the constitutional privilege against self-incrimination. The Supreme Court, in *United States* v. *White*,[25] rejected this

[22] See also Stackpole Carbon Co. (Case No. 3–7207), and Speer Carbon Co. (Case No. 3–13951).

[23] Also see Taylor Forge & Pipe Co. (Case No. 6–8386) and General Steel Castings Corporation (Cases Nos. 6–16199 and 6–15200).

[24] Prepared in the Office of the Solicitor, Department of Labor. The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law nor to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

[25] —— Sup. Ct. —— (June 12, 1944), reversing —— Fed. (2d) —— (C.C.A.), discussed in Monthly Labor Review, November 1943 (p. 969).

claim, holding that he could not make it on behalf of the union because the privilege against self-incrimination is purely personal and cannot be availed of by an organization, and that he could not make it on his own behalf because the privilege is confined to the private records of the individual claiming it. The Court was careful to state, however, that it was expressing no opinion on the broader question whether labor unions would be considered legal entities, separate from their members, like corporations and certain unincorporated associations, for other purposes.

*Employers' freedom of speech and the Wagner Act.*—In the case of *Budd Mfg. Co.* v. *National Labor Relations Board*,[26] previously discussed in the Monthly Labor Review,[27] the Circuit Court of Appeals for the Third Circuit held that the expression of the company's preference for an inside union did not constitute an interference with the employees' right to organize under the National Labor Relations Act.

The Budd case has been widely publicized as establishing that the employer's right to express his preference for a particular union is unqualifiedly protected by the free-speech guaranty of the first amendment.[28] Any such inference has been dispelled, however, by a subsequent decision of the same court in the case of *National Labor Relations Board* v. *M. E. Blatt Co.*[29]

During proceedings by the Board for reinstatement of employees who were discriminatorily discharged because of membership in or activity on behalf of the union, the Blatt Co. repeatedly posted notices advising its employees that it was not necessary for them to join or to pay dues to any organization in order to continue in the company's employ. The Board found that the text of the notices "* * *" in unambiguous terms called upon the employees to continue to deal directly with the respondent in the future, as they had for 25 years in the past, without the intervention of labor organizations, and clearly implied that such intervention would constitute the antithesis of a relationship based upon mutual consideration and cooperation between the respondent and its employees. Issued at a time when the union was seeking to organize the employees, the notice constituted a campaign appeal by the respondent directed toward defeating the efforts of the union." The Board concluded that the employer's emphasis in the notice upon direct dealing and the continuation of a past "happy relationship" in which the employees had been represented by no labor organization nullified the company's position of theoretical recognition of the right of its employees to organize. The court upheld the Board's findings on this point. It held that the guaranty of freedom of speech contained in the first amendment to the Constitution does not guarantee the employer an immunity from the legal consequences of his verbal acts. In this case, these verbal acts, when considered in the context of the employer's entire conduct, constituted a deliberate and forceful effort by the employer to discourage its employees from membership and activity in the union. The court disagreed with the statement of the Second Circuit Court of Appeals in the American Tube Bending Co. case [30] that the decision of the Supreme Court in *National Labor Rela-*

[26] —— Fed. (2d) —— (May 12, 1944).
[27] Monthly Labor Review, July 1944 (p. 126).
[28] New York Times, May 14, 1944 (p. 1, col. 2).
[29] —— Fed (2d) —— (June 9, 1944).
[30] *National Labor Relations Board* v. *American Tube Bending Co.*, 134 Fed. (2d) 993, certiorari denied, 320 U. S. 768.

*tions Board* v. *Virginia Electric & Power Co.*[31] guarantees the employer absolute freedom to express his views in regard to the employees' selection of a bargaining agency.

A substantially similar decision was rendered by the Eighth Circuit Court of Appeals in *Elastic Stop Nut Corporation* v. *National Labor Relations Board.*[32] At a time when the company's employees were divided for and against an unaffiliated organization, the company's foreman indirectly, but clearly, expressed his preference for an unaffiliated organization. Thereafter, although much of the organization of an unaffiliated union was taking place in the plant during working hours, the company took no steps to rebut the natural tendency of the employees to presume therefrom that the company favored the formation of an unaffiliated labor organization. In fact, the company assisted the organization of the unaffiliated union by permitting posting of notices and collection of dues on its premises. The company claimed that the foreman's remarks were protected by the free-speech guaranty of the first amendment. The court rejected this claim, holding that, although an expression of opinion may be protected when such utterances do not constitute coercion under the act, speech that amounts (in connection with other circumstances) to coercion within the meaning of the act is not protected. The court stated that the question whether the particular remarks, in the light of the entire conduct of the company, amounted to coercion, was a question of fact to be determined by the Board.

*Refusal to abide by terms of union contract as unfair labor practice.*—In *In re Carroll Transfer Co.*,[33] the employer refused to bargain with the union, by repudiating a closed-shop provision in the union contract and by failing to answer the union's request that a disagreement regarding the closed-shop provision be submitted to arbitration as provided in the contract. The employer entered into individual hiring contracts and in effect negotiated with nonunion members concerning terms of employment.[34] The Board held that the employer's duty to bargain collectively with a duly chosen representative of the workers did not end with the signing of the contract and that the employer's action in this case constituted a refusal to bargain and hence an unfair labor practice.

It has been pointed out that this decision has the effect of providing an indirect method of enforcement of union contracts.[35]

*Consent election agreement held a private contract.*—In *Sun Ship Employees Assn.* v. *Industrial Union of Marine & Shipbuilding Workers of America, Local No. 2*,[36] the company consented to the holding of an employees' election by the National Labor Relations Board. The election was held and the Regional Director of the Board found that the C. I. O. union received 24 votes more than the majority required by the terms of the agreement for a consent election. The company challenged this finding on the ground of fraud. The Federal District Court and the United States Circuit Court of Appeals for the Third Circuit refused to entertain jurisdiction over the matter, on the ground

[31] 314 U. S. 469, discussed in Monthly Labor Review, December 1943 (p. 1196).
[32] 142 Fed. (2d) 371 (May 1, 1944).
[33] — N. L. R. B. — (June 19, 1944).
[34] It is well established that bargaining with individual employees, rather than a duly designated collective bargaining agent, violates the act. *J. I. Case* v. *National Labor Relations Board*, — Sup. Ct. — (Feb. 28, 1944), discussed in Monthly Labor Review, April 1944 (p. 788).
[35] See 14 Labor Relations Rept., No. 16, supplement, p. 4.
[36] — A. (2d) — (C. P. Pa.) (May 16, 1944).

that the agreement for the consent election was a private contract of arbitration and no Federal question was involved. The company thereupon brought an action in the State court which held that it had the jurisdiction to consider the matter and, if the company's allegations are sustained, to set aside the election.

*Court review of War Labor Board orders.*—A group of employers brought a suit to annul and enjoin a directive order of the National War Labor Board, on the ground (among others) that the order violated the applicable statutes and Executive orders of the President. The Board moved to dismiss the action on the ground that its order could not be reviewed by a court. The Board's position was upheld by both the lower court and the United States Court of Appeals for the District of Columbia in *Employers Group of Motor Freight Carriers, Inc.* v. *National War Labor Board*.[37] After examining the legislative history of the War Labor Disputes Act of June 25, 1943, the court concluded that Congress positively intended that the Board's order should not be reviewed. Provisions for enforcement and review of the Board's orders in the courts had been considered and then rejected by Congress after the chairman of the Board, in a letter to a member of the Conference Committee of the Senate and the House, had opposed the adoption of any provision for enforcement or review. The Court of Appeals pointed out that the Board's order was merely advisory and that any action which might be taken by the President in taking over the companies would not depend upon any action of the War Labor Board.

Prior to this decision of the Court of Appeals, Justice Goldsborough of the District Court had refused to dismiss a similar action against the Board brought by Montgomery Ward.[38] After the decision of the higher court in the Freight Carriers case, the Government was granted a rehearing on its motion to dismiss the Montgomery Ward suit. Justice Goldsborough reaffirmed the prior ruling,[39] however, on the ground that a court of equity has the power to restrain arbitrary and capricious conduct of an administrative body, in wartime as well as in peacetime, and will not summarily refuse its aid where such conduct is alleged. The court expressed its belief that this conclusion was not affected by the language of the Freight Carriers opinion.[39a]

*State regulation of labor unions.*—Ruling on the constitutionality of the sweeping provisions of the 1943 Alabama Bradford Act regulating labor unions,[40] the Alabama Supreme Court, in *Alabama State Federation of Labor* v. *McAdory*,[41] held three of the act's provisions invalid, while upholding the remainder of the act. The court held the following provisions invalid:

1. A provision forbidding strikes not approved by secret ballot by a majority of workers in the plant. The court held that this provision imposed an unreasonable restraint upon the right of a minority group to engage in an otherwise lawful strike.

2. A provision barring secondary boycotts. Under this section, the refusal of a worker to handle nonunion material was made a

[37] —— Fed. Supp. —— (June 2, 1944).
[38] —— Fed. Supp. —— .
[39] —— Fed. Supp. —— .
[39a] Since this article was prepared, Justice Goldsborough's decision in the Montgomery Ward case has been reversed by the Court of Appeals, —— Fed. (2d) —— (App. D. C., July —, 1944).
[40] Discussed in Monthly Labor Review, October 1943 (p. 778).
[41] —— S. E. (2d) —— (May 25, 1944).

misdemeanor, with permissible heavy penalties. The court held that a labor union could refuse to permit its members to work on material produced or transported by nonunion labor, as long as this action was not directed against a particular individual, and that, in any case, any restraint imposed on the right of an individual worker to refuse to work under those circumstances would be a violation of his civil rights guaranteed to him by the fourteenth amendment.

3. A prohibition against political contributions by labor organizations and by employer groups. This provision was declared invalid on the ground that the inclusion of a provision directed against employer groups in a law regulating labor unions violated the Alabama Constitution, which requires that every law have only one subject.

The court upheld (*a*) a requirement that labor unions file with the State financial statements and copies of their constitutions and bylaws; (*b*) a provision making it unlawful for any labor union or other party to require work permits as a condition of employment; and (*c*) a section providing that supervisory employees may not belong to a union which accepts other types of employees into membership.

The court rejected the argument that the various provisions of the statute were so interrelated that the striking out of some of the provisions called for the invalidation of the entire act. It likewise rejected the contention that the act was repugnant to the National Labor Relations Act. Two of the six justices hearing the case dissented on the ground that the entire law was unconstitutional.

The provision of the Wisconsin Employment Peace Act, making it an unfair labor practice for an employer "to encourage or discourage membership in any labor organization," [42] recently discussed in the Monthly Labor Review,[43] was again the subject of judicial consideration in *United Automobile, Aircraft & Agricultural Implement Workers of America, Local 283*, v. *Wisconsin Employment Relations Board*.[44] In that case, the company and the union entered into a maintenance-of-membership contract providing that nonmembers, as a condition of employment, should either join the union or obtain work permits from the union upon payment of one and one-half times the union dues. The Wisconsin Employment Relations Board found that the making of this contract and the discharge of employees for not being members of the union or not having a work permit constituted an unfair labor practice under the Wisconsin Employment Relations Act, because it discriminated "in regard to hiring and tenure of employment" and thereby encouraged membership in the union in contravention of the statute. After comparing the State Labor Relations Act with the Wagner Act, the court found that the two acts were not in conflict and, consequently, that the State statute was constitutional and that the State Board had jurisdiction over the matter unless and until the Federal Board assumes jurisdiction of the particular controversy. The court held that the holding of an election and the certification of a bargaining agent by the National Labor Relations Board did not amount to such an assumption of jurisdiction by the Federal Board. The court further upheld the State

[42] Section 111.06 (1) (c) provides that it shall be an unfair labor practice to encourage or discourage membership in any labor union, except that an employer shall not be prohibited from entering into a closed-shop contract if three-fourths of the employees vote for the contract.

[43] See Monthly Labor Review, May 1944 (p. 1023), discussing *International Brotherhood of Paper Makers, Local No. 66* v. *Wisconsin Employment Relations Board*, —— N. W. (2d) —— (Feb. 24, 1944).

[44] 14 N. W. (2d) 872 (Sup. Ct. Wis.) (June 6, 1944).

board's conclusion that the contract resulted in a discrimination against nonunion members and, consequently, encouraged membership in the union in violation of the State law. Three justices dissented.

In the case of *In re Eppinger & Russell Co.*[45] the employers refused to bargain with the union certified by the Board, on the ground that the union representative had not obtained a license required by a Florida statute.[46] The Board held that failure to obtain such a license was not a sufficient excuse for the employer's refusal to bargain as required by a paramount Federal law.

## *Wage and Hour Law*

*Validity of Administrator's definition of "area of production."*—Section 13 (a) (10) of the Fair Labor Standards Act exempts from the overtime provisions of the act employees engaged in certain types of processing of agricultural commodities "within the area of production (as defined by the Administrator)." By a 5–4 decision the United States Supreme Court, in *Addison* v. *Holly Hill Fruit Products*,[47] agreed with the Circuit Court of Appeals for the Fifth Circuit that the Administrator's definition of "area of production" was invalid because it included a limitation on the number of employees in the processing establishment.[48] The majority of the Court said that there was nothing in the statute or in the legislative history to indicate that Congress, in using the phrase "area of production," meant to convey "any idea other than that which area usually conveys," and concluded that the Administrator's authority was limited "to designating territorial bounds," and did not "allow the Administrator to discriminate between smaller and bigger establishments within the zone of agricultural production." The Court conceded that the problem "involved complicated economic factors," and that the Administrator "may properly weigh and synthesize all such factors," but ruled that he could do "no more"; having drawn the "geographic bounds" he cannot draw a distinction between establishments within those bounds "based on the number of employees."

The majority recognized the broad scope of economic factors which may properly be considered by the Administrator. For example, at one point in the opinion it is said that "Congress gave the Administrator appropriate discretion to assess all the factors relevant to the subject matter, that is, the fixing of minimum wages and maximum hours." At another point, the opinion says that Congress "gave the Administrator ample power, in defining the area, to take due account of the appropriate economic factors in drawing the geographical lines." These statements appear broad enough to include the size factor and the minority so interprets them. Mr. Justice Rutledge, speaking for the dissenting justices, construes the majority opinion as authorizing the Administrator to take into account all economic factors, including size, provided he does "not state them in his definition." According to the dissenters, the problem is one of "mere formulation"—"the Administrator must state his results only in surveyor's terms"; he

[45] 14 N. L. R. B. 491 (June 7, 1944).
[46] This statute was discussed in Monthly Labor Review, October 1943 (p. 778).
[47] 320 U. S. 725 (June 5, 1944).
[48] For instance, one of the definitions involved in this case provided, among others, that the number of employees in the establishment must not exceed 7 for the exemption to apply.

cannot "directly and purposively * * * draw the line between the zone of farming and the zine of industry. This must be done only indirectly, in an awkward, roundabout way."

The dissenting justices thought that the definition was valid. They found that Congress intended by this exemption to draw a line "between farm workers, who are excluded from, and industrial labor which is within," the coverage of the act, and that size was not an irrelevant factor in distinguishing between groups which may do essentially the same work in different ways, "one the farming way, the other the industrial one." The dissenting opinion also referred to the legislative history to demonstrate that it was the congressional intent to limit the scope of the exemption to small plants, pointing out that although various views were expressed by the legislators, "all revolved around the question of size," and that this sentiment could be taken as the Administrator's "guiding light." The conclusion of the dissent was that "area of production" as used in the section 13 (a) (10) exemption "means an exemption limited to persons * * * within a production region, but selected from all so situated by an exercise of the administrative judgment in accordance with the statute's prime objects and chief limitations, among which necessarily is the size of the plant."

Although holding the definition invalid, the Supreme Court refused to accept the contention of the employer and the conclusion of the Court of Appeals that the right to exemption should be determined by the remaining valid portions of the definition. It held that the duty of defining rested with the Administrator and that the Court could not assume that he would adopt the definition which would result if the numerical provision were deleted. Likewise rejected was the contention of the employees that the absence of a valid definition resulted in their being within the coverage of the act. The opinion concluded that it was the congressional intent to exempt some, but not all, of the employees engaged in the particular industry, and that to adopt the employees' contention would nullify the congressional purpose. The majority of the Court held, therefore, that the proper disposition of the case under the circumstances was to return it to the district court pending the adoption by the Administrator, "with all deliberate speed," of a new and valid definition, which should then be applied retroactively.

*Administrator's power to prohibit home work.*—On August 21, 1943, the Administrator of the Wage and Hour Division issued a wage order establishing a minimum wage of 40 cents an hour in the embroidery industry, and prohibiting industrial home work in that industry except by persons who have obtained special home-work certificates issuable under certain conditions. This home-work prohibition was inserted in the order pursuant to section 8 (f) of the act, which authorizes the Administrator to include in wage orders issued pursuant to section 8 "such terms and conditions as the Administrator finds necessary to carry out the purposes of such orders, to prevent the circumvention or evasion thereof, and to safeguard the minimum wage rates established therein." The issuance of the order was preceded by extensive public hearings on the question of the appropriate minimum and on the question whether home-work prohibition was necessary to safeguard the enforcement of the minimum wage; and the order was accompanied by detailed findings and opinion of the Administrator. The Admin-

istrator found, among other things, that experience under the Fair Labor Standards Act and the wage orders issued pursuant to it has demonstrated that the practice of distributing work to employees in their homes results in "wholesale violation of the minimum-wage and record-keeping requirements of the act and regulations" and furnishes "a ready means of circumventing or evading the minimum-wage order"; that the problem would not be solved by further regulation of record-keeping practices or governmental establishment of piece rates or any other means short of eliminating industrial home work; that, besides resulting in underpayments to the home workers themselves, industrial home work creates a competitive disadvantage to employers of factory labor, thereby undermining the wage structure throughout the industry and thwarting the purposes of the order and the act; and that experience in comparable industries and conditions in the embroidery industry indicate that the transfer of work from home to factory can be accomplished without hardship to employees or their employers.

Several home workers and employers of home workers in the embroidery industry filed petitions under section 10 (a) of the act challenging the validity of the order. In *Guiseppi* v. *Walling*,[49] the United States Circuit Court of Appeals for the Second Circuit upheld the validity of the order prohibiting industrial home work, on the ground that the issuance of this order was within the authority contained in section 8 (f) of the act. The court examined carefully the legislative history of the act and found nothing therein to support the petitioners' contention that Congress did not intend to delegate such a sweeping authority to the Administrator. The court likewise rejected the argument that prohibition of home work violates due process of law or constitutes improper delegation of legislative power by Congress to the Administrator in violation of the Constitution.

Under section 8 (e) of the act, all wage orders (except in unusual circumstances) will expire in October 1945, when a universal 40-cent minimum automatically will go into effect under section 6 (a) (3) of the act. The act contains a provision authorizing the Administrator to annex "terms and conditions" to "orders" issued under section 8, but no such power is expressly given to him as to wage rates automatically established under section 6 when no wage order is operative. While Judge Frank, in his opinion, expressly declined to pass upon the question of the Administrator's authority to prohibit home work in order to enforce the "statutory" minimum wages, Judge Learned Hand, in his concurring opinion, expressed his belief that such authority is clearly implied from the legislative history of the statute. Judge Swan dissented on the ground that prohibition of home work, whether in connection with wage orders or statutory minimum wages, is not authorized by the act.

*Inapplicability of "seamen" exemption to dredgemen.*—In *Walling* v. *McWilliams Dredging Co.*,[50] the United States District Court in Illinois upheld the Administrator's contention that dredgemen are not within the exemption of "seamen" from the Fair Labor Standards Act contained in section 13 (a) (3) and are, therefore, covered by the act. The court stressed the fact that the Fair Labor Standards Act is a remedial statute which should be liberally construed and the exemptions from which should be applied strictly.

[49] 7 Wage-Hour Rept. 703 (June 27, 1944).
[50] 7 Wage-Hour Rept. 762 (N. D. Ill.) (June 19, 1944).

## *War Labor Board Decisions*

In the case of *In re California Metal Trades Association*,[51] the union had refused to comply with the Board's order directing it to rescind a union ban on overtime work. As a penalty designed to enforce the Board's order, the Board issued an additional order barring any renewal contract or any retroactive wage adjustments until the union lifts its ban on overtime work.

In *In re Consolidated Vultee Aircraft Corporation*,[52] the union in the Tucson, Ariz., plant demanded joint participation with the company in the determination of merit increases and promotions. The Board rejected this demand, although it required the company to notify the union of the management's determinations as to such increases and promotions. The Board rejected the argument that unilateral determination of these matters by the company was prohibited by the National Labor Relations Act. It stated that that act merely prohibited bargaining between the company and individual employees when such bargaining constituted evasion of collective bargaining with a duly designated union over rates of pay. The Board was of the opinion that, where rate ranges have been established through regular collective-bargaining procedures, the decisions under the Wagner Act do not go so far as to require joint bargaining over all merit increases and promotions within the framework of the rates thus established.

In the *V. O. Milling Co.* case,[53] in which the union lost its majority because of the employer's unfair labor practices, the Regional Board recommended the standard maintenance-of-membership clause, without the usual "escape" provision, retroactive to the date when proof of the company's unfair labor practices was first submitted in a formal hearing before a National Labor Relations Board trial examiner.

In *Norma-Hoffman Bearings Corporation*,[54] the union contract, containing the standard maintenance-of-membership clause, came up for renewal. The Regional Board noted that almost 30 percent of the employees were delinquent in dues but that the union had not pressed its right under the contract to have the employees discharged. The union contended that the employees were purposely delinquent in order to provoke their discharge, with the result that, under manpower rules, they would be eligible to secure higher-paying jobs elsewhere. The union stated that it was reluctant to force the discharge of employees because of the effect on production. In order to meet this situation, the Board ordered that the maintenance-of-membership contract be renewed with an escape clause, but that no employee who was a union member under the old contract be allowed to resign under the new escape clause until he had paid up the back dues; and that a compulsory check-off of dues be written into the contract in order to prevent the interruption of critical war production.

In *In re Nebraska Defense Corporation*,[55] the Regional Board directed the company to pay its employees for the 30-minute lunch period because of the company control and restrictive discipline prevailing during the lunch period. The Regional Board rejected the argument

[51] 16 W. L. R. 158 (June 4, 1944).
[52] 16 W. L. R. 159 (June 8, 1944).
[53] 16 W. L. R. 462 (Regional Board —, June 1944).
[54] 15 W. L. R. 291 (Regional Board I, February 28, 1944).
[55] 16 W. L. R. 210 (Regional Board VII, May 25, 1944).

that it had no authority to order pay for time not actually worked, pointing to the hundreds of decisions of the National Board and Regional Boards either approving or ordering pay for vacations, holidays not worked, call-in time, rest periods, lunch periods, travel time, etc.

### *Who are "employees" under Wagner Act and Social Security Act*

In *In re Western & Southern Life Ins. Co.*,[56] The National Labor Relations Board, relying in part on the recent Supreme Court case of *National Labor Relations Board* v. *Hearst Publications, Inc.*,[57] held that life-insurance collectors and salesmen who were designated "agents" and "trustees" by the company were employees within the meaning of the National Labor Relations Act.

In a recent decision under the Social Security Act, members of a traveling orchestra in which the leader personally plays an instrument were held to be employees of the innkeeper and covered by the act.[58]

[56] 14 N. L. R. B. 448 (May 25, 1944).
[57] Discussed in Monthly Labor Review, July 1944 (p. —).
[58] *Nell* v. *Department of Labor*. —— N. E. (2d) —— (Super. Ct. Ill.) (May 20, 1944).

# *Discharged Soldiers*

## Federal Aid for Veterans: "G. I. Bill of Rights"

THE readjustment in civilian life of returning veterans of the present war is the aim of recent Federal legislation. Public Law 346, approved June 22, 1944, makes provision for the education of servicemen, for loans for the purchase of homes, farms, and business property, for employment placement service, and for readjustment allowances for former members of the armed forces who are unemployed.[1]

*Education.*—A duly qualified veteran who desires further education is to begin the course of study not later than 2 years after either the date of his discharge or the termination of the present war, whichever is later. No education or training is to be afforded beyond 7 years after the termination of the present war. Furthermore, the law states that any such person who was not over 25 years of age at the time he entered the service "shall be deemed to have had his education or training impeded, delayed, interrupted, or interfered with."

Eligible persons are entitled to education or training, or a refresher or retraining course, at an approved educational or training institution. After a maximum of 1 year of such activity, and upon satisfactory completion of an education or training course, the individual is entitled to additional education or training for a period not to exceed the time he was in active service on or after September 16, 1940, and before the termination of the war. In no event may the total period of education or training exceed 4 years.

Expenses for this education or training are to be defrayed by the Government. Thus, for each veteran so enrolled, academic expenses, not to exceed $500 for an ordinary school year, are to be paid by the Administrator of Veterans' Affairs. While the veteran is enrolled and is pursuing a course, he is to be paid a monthly subsistence allowance of $50 if single or of $75 per month if he has a dependent or dependents.

*Loans.*—Government guaranty of loans to veterans for the purchase or construction of homes, farms, and business property is authorized. If a loan "appears practicable" to the Administrator, he is to guarantee the payment of an amount not exceeding $2,000 for each eligible veteran who applies. These loans are to bear not more than 4 percent interest per annum and are to mature in not more than 20 years.

*Assistance in obtaining work.*—To aid veterans in securing employment, the act states that "there shall be an effective job counseling and employment placement service for veterans * * * to provide for them the maximum of job opportunity in the field of gainful employment." For this purpose, the law created a Veterans' Placement Service Board to cooperate with and assist the U. S. Employment

[1] Public Law 346, 78th Cong., 2d sess., approved June 22, 1944.

Service. This Board is to consist of the Administrator of Veterans' Affairs (Chairman), the Director of the National Selective Service System, and the Administrator of the Federal Security Agency, or whoever may have the responsibility of administering the functions of the U. S. Employment Service. The Board is to determine all matters of policy relating to the administration of the veterans' division of the Employment Service.

*Unemployment benefits.*—The law likewise provides for former members of the armed forces who are unemployed. Eligible veterans who are not employed may receive a readjustment allowance not exceeding $20 per week for not more than 52 weeks of unemployment. However, a claimant will be disqualified from receiving an allowance if—

(1) He leaves suitable work voluntarily, without good cause, or is suspended or discharged for misconduct in the course of employment;

(2) He, without good cause, fails to apply for suitable work to which he has been referred by a public employment office, or to accept suitable work when offered him; or

(3) He, without good cause, does not attend an available free training course as required by regulations issued pursuant to the provisions of this title.

A claimant will also be disqualified from receiving an allowance for any week in which he was unemployed through a stoppage of work which was the result of a labor dispute. However, this disqualification does not apply if it is shown that—

(1) He is not participating in or directly interested in the labor dispute which causes the stoppage of work; and

(2) He does not belong to a grade or class of workers of which, immediately before the commencement of the stoppage, there were members employed at the premises at which the stoppage occurs, any of whom are participating in or directly interested in the dispute.

# *Wage and Hour Statistics*

## Basic Wage Rates in Private Shipyards, June 1943[1]


### *Summary*

MASS production, made possible by the demand for large numbers of ships, has not only changed the method of building vessels and the duties of the various crafts but has also enabled shipyards to utilize inexperienced workers profitably. Nevertheless, during June 1943, over 50 percent of the wage earners in the shipbuilding industry were classified as skilled craftsmen.

As expected of an industry in which the various production areas have dissimilar historical backgrounds and in which collective-bargaining agreements are concluded with different national unions, each area has evolved an employment structure peculiar to its own needs. The greatest variation in such structure exists between the two largest shipbuilding areas, the Atlantic and Pacific Coasts. The occupations most vital to the shipbuilding industry are, however, found in substantially all areas. These are, in order of their numerical importance in June 1943, welders, shipfitters, machinists, pipefitters, electricians, carpenters, laborers, burners, painters, and sheet-metal workers.

The establishment of the rate of $1.20 an hour for first-class craftsmen by the Zone Stabilization Agreements has resulted in a greater concentration of employees at this rate than at any other. This is true of yards in all regions regardless of stabilization status, size, or type of construction. Since no other rates were established by these agreements, rate concentrations for other classes of employees vary considerably among the regions. On the Pacific Coast, labor and management have negotiated a master contract which supplements the Stabilization Agreements, to the extent of establishing rates for the most important groups of employees, such as first-class craftsmen, trainees, helpers, and laborers.

Despite the lack of uniformity, the average base rate for employees in all regions in yards covered and not covered by Stabilization Agreements varied by only 2.7 cents, covered yards reporting $1.066, and those not covered $1.039 per hour. The size of covered yards seems to influence the average base rate reported. With the exception of yards employing over 25,000 workers, there was a steady decrease in base rate as the size of yard increased. Yards employing fewer than 100 wage earners reported an average base rate of $1.223; the lowest rate ($1.053) was shown for yards with 10,000 to 24,999 wage earners.


[1] Prepared in the Bureau's Division of Construction and Public Employment by A. A. Belman.

Except on the Pacific Coast, where a repair differential of 11.6 percent had been established for repair yards, the rate structure in yards engaged only in repair work did not differ materially from that in yards engaged in both new construction and repair. The former showed an average base rate of $1.025 and the latter of $1.067 per hour. On the Pacific Coast the average base rate in repair yards was $1.233, as compared with $1.149 in yards constructing new ships or building as well as repairing ships.

Little uniformity between the regions existed as to the average base rate reported for specific occupations or for classes within an occupation. First-class patternmakers in covered yards were the highest-paid employees, receiving $1.396, while bolters received the lowest rate, $0.985. The same relative positions on the rate scale were held by "other classes" of mechanics in these occupations, patternmakers receiving $1.111 and bolters $0.938 an hour. Anglesmiths' helpers were the highest-paid ($0.958) group of helpers, and erectors' helpers received the lowest hourly rate ($0.749).

Since June 1943 various changes have occurred in the shipbuilding industry that have affected wage-rate distribution. In addition to new rates established in individual cases by the Shipbuilding Commission of the War Labor Board and regional revisions brought about through the efforts of the Shipbuilding Stabilization Committee of the War Production Board, a thorough study of wage-rate inequalities by the Shipbuilding Commission has resulted in the tentative establishment of a schedule of uniform rates for specified occupations and classes of workers on the Atlantic Coast. Twenty-six occupations were defined as skilled, and rates of $1.20, $1.12, and $1.04 per hour were established for the first three classes of skilled workers. Rates scheduled for helpers and laborers were assigned on an area basis within the Atlantic Coast region.

## *Scope and Method of Survey*

A series of administrative orders, issued on June 8 and 9, 1943, by the Joint Committee on Wage Stabilization [2] within the shipbuilding industry required all ship and boat yards holding contracts with any of the three procurement agencies to submit occupational wage-rate schedules for the week ending June 18, 1943. The orders provided specifically for the submission of schedules in the form of lists with supervisory employees,[3] premium men,[4] and productive wage earners reported separately and grouped according to primary occupational designation, grade or class of work, and the base rate of pay with the total number of employees at each rate. Schedules for administrative, clerical, and technical employees were not required. Basic data for the present report were obtained from copies of the wage-rate schedules which were transmitted to the Bureau of Labor Statistics by the procurement agencies.[5]

[2] Composed of representatives of the "procurement agencies," i. e., the Navy and War Departments and the Maritime Commission.

[3] Defined as "employees with any supervisory function whatsoever (including snappers, pushers, and all types of working leaders)."

[4] Defined as "mechanics who work at their trades and who, by reason of exceptional skill and special qualifications, receive a basic wage rate in excess of $1.20 per hour."

[5] For recent surveys of straight-time earnings in private shipyards, see Monthly Labor Review, August 1943 (pp. 315–336) and January 1944 (pp. 140–157). These earlier surveys of earnings reflected the influence of incentive payments in addition to the basic wage rates as covered by the present article.

The 387 reporting boat and ship yards represented approximately 71 percent of all yards with Federal contracts in continental United States in June 1943. Approximately 95 percent of the Pacific and Inland yards with Federal contracts were represented; Great Lakes, Atlantic Coast, and Gulf Coast yards followed with 72 percent, 65 percent, and 41 percent, respectively.[6] The actual number of wage earners reported for June 1943 was as follows:

| | *Total* | *Covered yards* | *Not covered yards* |
|---|---|---|---|
| All regions | 1, 146, 402 | 1, 030, 671 | 115, 731 |
| Atlantic Coast | 467, 683 | 441, 663 | 26, 020 |
| Gulf Coast | 130, 571 | 120, 702 | 9, 869 |
| Pacific Coast | 452, 797 | 433, 147 | 19, 650 |
| Great Lakes | 50, 800 | 35, 159 | 15, 641 |
| Inland | 44, 551 | ---------- | 44, 551 |

The reporting yards employed 1,146,000 wage earners, or 92 percent of the total in all private shipyards at the time. With the exception of a few yards in the Gulf Coast region, all yards with more than 1,000 wage earners submitted occupational wage-rate schedules. Although a fairly large number of the very small yards did not submit schedules, their total employment was insignificant.

Schedules were received from 319 yards engaged in new construction or both new construction and repair and from 68 yards engaged in repair work only. These schedules represented approximately 80 percent of all new-construction yards and 65 percent of the repair yards in the United States.

The term "wage rate" as used in this article refers to the first-shift hourly base rate of pay and does not include premiums for overtime or shift bonuses, nor additional compensation under piece-work or production-bonus systems.

All employees receiving weekly, monthly, or annual salaries were eliminated, since there was no means of converting such rates to comparable hourly rates. This group, numbering slightly over 14,000 workers, or 1.2 percent of all reported wage earners, was composed primarily of supervisory employees but also included some 1,700 guards and smaller numbers of plant-protection firemen and stockkeepers.

In the following tabulations and discussion, employees in specified occupations are classified according to grade or class of work. For purposes of uniformity, premium men are combined with first-class craftsmen. Furthermore, since there is little or no standardization among the lower grades of mechanics, these, together with groups called improvers and handymen, are grouped under the general category "craftsmen, other classes."[7] "Leadermen" include all working leaders such as "snappers" and "pushers," as well as "leaders" and "leading men," and are listed together with foremen and superintendents under the title "supervisors."[8] Helpers have been classified separately, while learners and beginners have been combined with apprentices.

[6] Except for the Inland region, the regional groupings of yards referred to in this report conform to those established in the Zone Stabilization Agreements by the Shipbuilding Stabilization Committee. The Inland region includes yards which launch into the Mississippi and its tributaries.

[7] Pacific Coast trainees and some Gulf Coast apprentices were also included in this category. For further discussion of this organization, see p. 389.

[8] Some yards use the term "leader" to designate a working supervisor and the term "leading man" as a higher classification, equivalent to foreman. Where this was true the latter class was tabulated with foremen.

### *Regional Variations in Employment Structure*

Under normal conditions steel-vessel construction has been a "custom building" job. However, the wartime necessity of producing more ships in less time than ever before resulted in the introduction of mass-production methods which have been utilized with great success in the construction of the smaller combat vessels and most noncombatant ships.[9] In the rapid expansion of the shipbuilding industry, highly skilled jobs have been divided into their component processes and the labor force has been diluted through the introduction of large numbers of partially skilled workers and the use of inexperienced women in jobs traditionally held by experienced men.

Anticipating the manpower and labor problems which would inevitably follow rapid expansion of the industry, the Federal Government sought to mitigate these difficulties through the establishment of the Shipbuilding Stabilization Committee in 1940. The Committee, composed of representatives of the procurement agencies, labor, and management, was then a part of the National Defense Advisory Commission. It is now included within the War Production Board, with a member of the Board as its chairman. Since its inception the Stabilization Committee has devoted itself primarily to the task of decreasing labor-management differences and thereby increasing the time devoted to the actual construction of ships.

The chief stabilization device of the Shipbuilding Committee is the voluntary zone agreement. For purposes of such agreements the yards have been grouped into the Atlantic, Pacific, Gulf, and Great Lakes zones. The Committee does not operate in the Inland region. Yards employing approximately 90 percent of all wage earners have subscribed to the standards established by the Zone Stabilization Agreements, under which like conditions govern all signatories within a zone. The term "covered yards" as used in this discussion refers to shipyards that have been certified by the Shipbuilding Stabilization Committee of the War Production Board as subscribing to the standards established by the Zone Stabilization Agreements.

The Stabilization Agreements, recent War Labor Board decisions, and the changing labor patterns in the shipyards, in conjunction with increased unionization, have made for greater standardization in occupational wages in the shipbuilding industry. Nevertheless, basic differences among the several sections of the country remain. These result in part from historical development and in part from differences in the agreement provisions of the major unions on the Atlantic and Pacific Coasts. The greater percentage of new "war yards" on the Pacific Coast, many of which are in especially tight labor-market areas, also helps to account for the regional differences. Most Atlantic Coast yards were in operation before the war, and the new yards in this region are operated primarily by old-line management; as a result, the basic labor structure existing before the war has been carried over to the new yards. Furthermore, in general the Atlantic Coast has not experienced as considerable a labor shortage nor have the shipbuilding areas there had to compete as vigorously with other major war industries, such as aircraft.

[9] Mass-production methods were also utilized to some extent during World War I at the Hog Island Plant, Philadelphia, Pa. See The Shipbuilding Industry, by Roy W. Kelly and Frederick J. Allen (Boston, Houghton Mifflin Co., 1918) pp. 96-99.

Craftsmen composed well over 50 percent of the labor force in each of the five areas studied—over 60 percent on the Pacific Coast. There was also a relatively high percentage of helpers in each region, ranging from 12 percent in Inland yards to 20 percent on the Great Lakes. As indicated in table 1, the greatest deviation from the average was shown on the Atlantic and Pacific Coasts. Pacific Coast yards employed the highest percentage of first-class craftsmen (48.7 percent) and supervisors (9.3 percent) and the lowest percentage of other classes of craftsmen, laborers, and apprentices. Atlantic Coast yards, on the other hand, showed the lowest percentage of first-class craftsmen (19.8 percent).

TABLE 1.—*Percentage Distribution of Shipyard Workers, by Class of Workers and Region, June 1943*

| Class of workers | All regions | Atlantic Coast | Gulf Coast | Pacific Coast | Great Lakes | Inland |
|---|---|---|---|---|---|---|
| Craftsmen, first class [1] | 33.7 | 19.8 | 32.3 | 48.7 | 31.1 | 32.7 |
| Craftsmen, other classes | 23.3 | 33.9 | 21.2 | 13.3 | 22.8 | 21.3 |
| Helpers | 16.1 | 16.3 | 13.9 | 16.4 | 19.6 | 12.4 |
| Laborers | 5.1 | 5.4 | 9.2 | 3.2 | 5.1 | 9.4 |
| Apprentices and learners | 4.9 | 7.5 | 11.8 | .4 | 5.4 | 4.1 |
| Supervisors | 7.2 | 5.3 | 5.8 | 9.3 | 7.5 | 9.3 |
| Other workers [2] | 9.7 | 11.8 | 5.8 | 8.7 | 8.5 | 10.8 |
| All classes | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

[1] Includes premium men.
[2] Covers occupations considered as semiskilled and those not directly responsible for production work; i.e., guards, truck drivers, crane followers, and rivet heaters.

As was previously indicated, these variations result not only from the relative youth of the Pacific Coast yards but also from differences in union agreements and the stringency of the labor market in this region. The American Federation of Labor has contracts with the majority of the Pacific Coast yards, which provide for one class of craftsmen and up to three classes of trainees, helpers, and laborers. In Atlantic Coast shipyards, where the Congress of Industrial Organizations and the East Coast Alliance of Shipyard Workers [10] predominate, there are generally at least three classes of craftsmen, in addition to handymen, helpers, laborers, and apprentices.[11]

On the Gulf Coast, yards having contracts with the C. I. O. list occupations similar to those on the Atlantic Coast, whereas the A. F. of L. contracts provide for one class of craftsmen, apprentices,[12] helpers, and laborers. The occupational structures of Great Lakes yards are less uniform than those in the other regions though somewhat similar to those in Atlantic Coast yards. Individual Inland yards tend to follow the pattern predominating in the nearest adjacent region.

To obtain approximate uniformity in tabulating the wage schedules, it was necessary to consolidate craftsmen below first class into the general category of "craftsmen, other classes," which includes second

[10] A federation of independent unions.
[11] Some yards interpose the classification "improver" or "semiskilled" between the lowest grade of craftsman and the highest grade of handyman or helper. The classification "handyman" is used to designate a worker who has acquired sufficient skill in his trade to qualify for a rate higher than that paid a helper but is not prepared to assume the full responsibilities of a craftsman.
[12] Some of the contracts provide for various classes of apprentices. For example, one typical contract makes provision for helper apprentices, regular apprentices, and special apprentices. The latter group is a concession to war conditions and employees in this group are not required to spend as much time between promotions to a higher grade of apprentice and finally to the grade of craftsmen as are the other types of apprentice.

and third class craftsmen, improvers, semiskilled workers, and handymen. As Pacific Coast trainees received approximately the same rates as these workers, they also were incorporated into the group. Apprentices on the Gulf Coast presented a more difficult problem. Some yards listed as many as 15 rates for them, ranging from $0.75 to $1.10 an hour. Apprentices receiving rates on a level with those paid to craftsmen on other coasts were considered as equivalent to "craftsmen, other classes." Nevertheless, table 1 shows a substantially higher proportion of apprentices in yards on the Gulf Coast than in any other region.

A complete picture of structural differences in the five regions involves not only the variations in the proportions employed at each grade level but also the differences in the relative numbers in each occupation. Table 2 shows the occupational distribution of shipyard workers by region. Each occupation is composed of all grades or classes, from superintendent to helper.

TABLE 2.—*Percentage Distribution of Shipyard Workers, by Region and Occupation, June 1943*

| Occupation | All regions | Atlantic Coast | Gulf Coast | Pacific Coast | Great Lakes | Inland |
|---|---|---|---|---|---|---|
| Anglesmith | 0.3 | 0.2 | 0.4 | 0.5 | 0.2 | 0.1 |
| Blacksmith | .3 | .5 | .3 | .2 | .5 | .3 |
| Boilermaker | 2.3 | 1.6 | 3.5 | 2.8 | .6 | 2.4 |
| Bolter | .3 | .3 | .1 | .2 | 1.4 | .1 |
| Burner | 3.8 | 3.4 | 4.6 | 4.3 | 3.1 | 2.8 |
| Carpenter | 6.1 | 5.2 | 6.2 | 7.4 | 5.6 | 3.9 |
| Chipper and caulker | 2.8 | 2.5 | 2.3 | 3.3 | 3.0 | 2.9 |
| Coppersmith | .5 | .5 | .5 | .6 | (1) | (2) |
| Crane follower | .4 | .4 | .6 | .5 | .6 | .2 |
| Crane operator, over 20 tons | .7 | .7 | .4 | .6 | .8 | .6 |
| Crane operator, 20 tons and under | .6 | .4 | .8 | .6 | .2 | .6 |
| Driller | 1.0 | 1.2 | .4 | 1.1 | .5 | .1 |
| Electrician | 6.6 | 6.2 | 6.3 | 7.3 | 6.6 | 4.3 |
| Erector | .9 | 1.6 | .6 | .1 | 2.2 | 1.3 |
| Fireman and firewatcher | .6 | .8 | .3 | .5 | .3 | .3 |
| Furnaceman | .1 | .2 | (1) | (1) | .2 | (2) |
| Joiner | .8 | 1.0 | .2 | .6 | 1.9 | .2 |
| Laborer | 5.5 | 5.7 | 9.8 | 3.5 | 5.6 | 10.9 |
| Layer-out | .4 | .4 | 1.1 | .3 | .2 | .2 |
| Loftsman | .4 | .3 | .3 | .5 | .3 | .2 |
| Machinist | 8.1 | 9.0 | 7.8 | 7.1 | 10.0 | 6.8 |
| Molder | (1) | .1 | (1) | (1) | (1) | (2) |
| Painter | 3.1 | 3.0 | 2.9 | 3.0 | 4.1 | 4.8 |
| Patternmaker | .1 | .1 | (1) | (1) | .1 | (2) |
| Pipecoverer | .2 | .5 | .3 | (1) | .3 | .2 |
| Pipefitter | 7.2 | 7.1 | 8.1 | 7.2 | 8.2 | 5.3 |
| Plate-shop machine operator | .7 | 1.0 | .4 | .4 | 1.0 | 1.8 |
| Regulator and plate hanger | .7 | .6 | .1 | .9 | .7 | .1 |
| Rigger | 2.8 | 3.3 | 2.3 | 2.9 | 1.1 | .9 |
| Riveter | .4 | .6 | .1 | .3 | .3 | .1 |
| Rivet heater | .1 | .2 | (1) | .1 | .1 | (2) |
| Rivet holder | .1 | .2 | (1) | .1 | .2 | .1 |
| Rivet passer | .1 | .2 | (1) | (1) | .2 | (2) |
| Sheet-metal worker | 3.0 | 3.3 | 3.0 | 3.1 | 1.9 | 1.0 |
| Shipfitter | 11.0 | 9.0 | 13.0 | 12.7 | 10.3 | 8.1 |
| Stagebuilder | .6 | .5 | .3 | .8 | .7 | .1 |
| Tank scaler | .7 | .5 | .4 | .9 | .6 | 1.3 |
| Tool and die maker | .1 | .1 | (1) | (1) | .1 | (2) |
| Truck driver | .6 | .4 | .5 | .8 | .5 | .7 |
| Watchman and guard | 1.3 | 1.4 | 1.4 | 1.1 | 2.1 | 1.5 |
| Welder | 15.3 | 12.6 | 16.4 | 17.5 | 13.8 | 20.8 |
| All others | 9.4 | 13.2 | 4.3 | 6.2 | 9.7 | 15.0 |
| All occupations | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

[1] Less than a tenth of 1 percent.
[2] No employees reported for this occupation.

Of the 40 occupations listed in table 2, 10 are outstanding because of the number of employees reported and the consistency of the proportions in all regions. It may be concluded from this that the shipbuilding industry is most dependent upon the following occupations, listed in order of their numerical importance: Welders, shipfitters, machinists, pipefitters, electricians, carpenters, laborers, burners, painters, and sheet-metal workers.

Welders represent over 15 percent of all the wage earners in all regions combined and are numerically the most important group in each region. Differences in the types of vessels and methods of production that predominate account for the range in the proportion of welders employed. For example, Atlantic Coast yards have been used for building naval vessels, in addition to their peacetime construction of tankers, freight boats, and passenger liners. This combination of experience and available facilities has resulted in centralizing on the Atlantic Coast the combat-vessel program. Since many of the parts of combat ships must be riveted, there are proportionately fewer welders on the Atlantic Coast than in any of the other regions. Added to this are two further considerations: (1) There are a greater number of repair yards in this region that must be used in the case of riveted vessels, and (2) some Atlantic Coast yards use a combination riveted and welded hull on Liberty ships. All of these factors tend to decrease the number of welders and, conversely, to increase the number of riveters.

In the proportion of welders employed, West Coast yards, widely known for their all-welded construction of commercial vessels, rank second only to the Inland yards, which are engaged primarily in the construction of small boats and landing craft.

Among the most essential groups, in terms of efficient ship production, are the shipfitters, who are second in importance numerically among all occupations. Skilled shipfitters should be capable not only of lining up and assembling the structural and nonstructural parts of a vessel but also of welding and making templates and lay-outs for special forms that cannot be predetermined in the mold loft. On the Pacific Coast this occupational title includes over 5,000 San Francisco Bay "flangers." According to the chief naval architect of one of the larger yards in this area, the term "flanger" is specifically differentiated from "flange turner." The latter term applies to the worker who forms angles on plates, whereas the former applies to one who lines up parts on the platens or ways preparatory to welding. Inland yards employed the smallest proportion of shipfitters. Since the smaller landing craft are produced by mass-production methods which require that most parts be interchangeable, this lower proportion of shipfitters is to be expected, as well as the higher-than-average proportion of laborers. Furthermore, because these craft usually contain few or no structural parts of wood, Inland yards reported the lowest proportion of carpenters.

In addition to the 10 occupations listed above, there are several that are numerically important on a regional basis: Boilermakers on Gulf and Pacific Coasts; chippers and caulkers on Pacific Coast and Great Lakes; and riggers on Atlantic and Pacific Coasts.

The importance of these occupations results in part from purely local practices as well as from the nature of the construction. For

example, the Atlantic and Pacific regions, in which more large vessels are being constructed, employ a greater number of riggers than do the regions specializing primarily in smaller vessels. This is due to the larger loads and the greater number of structural parts required for the building of combat, auxiliary combat, and larger commercial vessels, as well as to the larger amount of rigging on the vessels themselves.

### *Regional Variations in Wage-Rate Distributions*

Among other provisions, the Zone Stabilization Agreements provide for the payment of $1.20 an hour to "standard first-class skilled mechanics." [13] Since most yards with over 1,000 employees are parties to the Stabilization Agreements and are by virtue of their size the chief employers of shipyard labor, the yards that are not covered by such agreements and those employing small numbers of workers are compelled to pay comparable rates if they wish to obtain and hold employees. When these latter two groups are not situated in the immediate vicinity of a major shipbuilding center, there is less necessity for paying comparable rates. However, the willingness of workers to migrate to areas of high rates tends to increase rates even in isolated yards. Consequently, as table 3 shows, in yards both covered and not covered by the Stabilization Agreements about 30 percent of all employees received the first-class rate. In addition to defining which occupations were to receive the first-class rate, labor and management on the Pacific Coast under the A. F. of L. master contract have negotiated uniform rates for laborers ($0.88), helpers ($0.95), and trainees ($1.05, $1.10, and $1.15)[14] and for practically all other production occupations.

Approximately 60 percent of all the wage earners were paid less, and 10 percent received more, than the first-class mechanics' rate. Although the proportions of employees at specific rates in both classes of yards were comparatively uniform at rates of over $1.20 an hour, there was some variance, especially on the Pacific Coast, where there were concentrations of employees at $1.30 to $1.35 and $1.35 to $1.40. This was caused primarily by the fact that a separate labor contract prevails in the San Francisco Bay area and northward to the Canadian boundary, providing for a premium of 11.6 percent in all yards engaged in repair and conversion.

While approximately three-fifths of the shipyard wage earners in all regions combined were paid less than the rate of $1.20, on the Atlantic Coast the proportion was three-fourths, on the Great Lakes almost two-thirds, but on the Pacific Coast only about one-half. Less than 10 percent of the wage earners in Pacific Coast yards received wage rates under $0.95, as compared with well over a third in the Great Lakes yards, two-fifths in Inland yards, and about 45 percent in yards on the Atlantic and Gulf Coasts.

Actually, as a result of the A. F. of L. contract provisions, there were few employees on the Pacific Coast who received less than the lowest established rate ($0.88 for laborers) and there was a substantial group of employees at the rate paid to helpers ($0.95). In contrast, there was a concentration of employees in Gulf yards in the

[13] Identified as "standard skilled mechanics" in the Gulf and Pacific Coast agreements.
[14] See p. 404 for discussion of establishment of uniform rates in other regions.

$0.60–$0.65 range and a high proportion of workers paid between $0.75 and $0.80, reflecting the large number of apprentices in that region.

The Atlantic Coast also had many workers paid less than $0.80 an hour, mostly in yards not covered by the Stabilization Agreements. The largest groups below $1.20 were in covered yards, however, at the $0.80–$0.85, $0.85–$0.90, and $1.00–$1.15 levels, which were the respective prevailing rates for laborers, helpers, and craftsmen other than first class.

TABLE 3.—*Percentage Distribution of Shipyard Workers by Region, Stabilizations Status, and Rate of Pay, June 1943*

| Basic rate group | All regions | | Atlantic Coast | | Gulf Coast | | Pacific Coast | | Great Lakes | | Inland |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Status under Stabilization Agreements | | | | | | | | | | |
| | Covered | Not covered | Covered | Not covered | Covered | Not covered | Covered | Not covered | Covered | Not covered | Not covered |
| Under $0.50 | (1) | 0.5 | (1) | 1.0 | (1) | 0.9 | (1) | (2) | 0.5 | 0.1 | 0.4 |
| $0.50 and under $0.55 | 0.1 | .5 | 0.2 | .9 | (1) | 1.0 | (1) | (1) | (1) | .1 | .5 |
| $0.55 and under $0.60 | .1 | .6 | .2 | .7 | 0.1 | 3.1 | (1) | (1) | (1) | .4 | .2 |
| $0.60 and under $0.65 | 1.9 | 2.1 | 1.8 | 1.5 | 9.2 | 13.2 | 0.1 | (1) | .8 | 1.8 | 1.0 |
| $0.65 and under $0.70 | 1.5 | 1.4 | 1.4 | 3.3 | 7.4 | 4.1 | (1) | 0.1 | .9 | 1.0 | .3 |
| $0.70 and under $0.75 | 1.1 | 3.5 | 2.1 | 9.4 | .6 | 2.0 | .1 | (1) | 2.9 | 4.1 | 1.8 |
| $0.75 and under $0.80 | 2.8 | 3.9 | 2.5 | 3.1 | 13.8 | 10.2 | (1) | .3 | 3.5 | 3.1 | 5.0 |
| $0.80 and under $0.85 | 7.5 | 7.5 | 14.7 | 5.6 | 6.6 | 2.3 | .1 | 1.1 | 11.1 | 5.9 | 13.0 |
| $0.85 and under $0.90 | 7.2 | 8.2 | 11.8 | 12.5 | 4.8 | 2.2 | 3.2 | 5.7 | 6.2 | 9.9 | 7.6 |
| $0.90 and under $0.95 | 5.0 | 7.9 | 7.9 | 10.7 | 3.7 | 2.1 | 2.0 | 1.2 | 9.2 | 7.5 | 10.6 |
| $0.95 and under $1.00 | 11.5 | 7.4 | 7.6 | 8.6 | 5.1 | 3.6 | 17.7 | 16.6 | 6.0 | 2.9 | 5.2 |
| $1.00 and under $1.05 | 5.5 | 7.6 | 10.3 | 4.6 | 2.9 | 3.9 | 1.2 | 1.6 | 7.8 | 18.4 | 9.1 |
| $1.05 and under $1.10 | 7.6 | 4.2 | 5.8 | 9.2 | 5.7 | 3.4 | 9.9 | 8.1 | 7.1 | 1.6 | .6 |
| $1.10 and under $1.15 | 5.9 | 4.3 | 7.9 | 3.9 | 2.3 | 1.4 | 4.8 | 1.8 | 8.0 | 6.6 | 5.5 |
| $1.15 and under $1.20 | 1.8 | .8 | 1.7 | .6 | .4 | 1.6 | 2.2 | 2.1 | 1.5 | .7 | .2 |
| $1.20 | 30.2 | 28.7 | 16.5 | 17.3 | 31.4 | 31.6 | 44.0 | 38.1 | 26.8 | 29.5 | 30.3 |
| $1.21 and under $1.25 | .4 | .2 | .4 | .1 | (1) | .1 | .5 | .8 | .3 | .1 | .1 |
| $1.25 and under $1.30 | 1.2 | 2.1 | 1.6 | 1.5 | .6 | 7.4 | 1.0 | 2.8 | 1.2 | 1.1 | 1.2 |
| $1.30 and under $1.35 | 2.9 | 2.9 | 1.5 | .9 | 4.4 | 3.1 | 4.0 | 8.4 | 3.0 | 1.9 | 2.0 |
| $1.35 and under $1.40 | 2.3 | 3.2 | 1.0 | 2.4 | .3 | 1.3 | 4.2 | 6.2 | 1.1 | 2.9 | 2.9 |
| $1.40 and under $1.45 | 1.3 | .5 | 1.1 | .4 | .3 | .6 | 1.9 | .8 | 1.0 | .1 | .7 |
| $1.45 and under $1.50 | .9 | .9 | .6 | .1 | .3 | .4 | 1.5 | 1.2 | .3 | (1) | 1.6 |
| $1.50 and over | 1.3 | 1.1 | 1.4 | 1.7 | .1 | .5 | 1.6 | 3.1 | .8 | .3 | .2 |
| All rates | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Average base rate | $1.066 | $1.039 | $1.008 | $0.978 | $0.979 | $0.990 | $1.151 | $1.157 | $1.041 | $1.036 | $1.035 |

[1] Less than a tenth of 1 percent.
[2] No employees reported in this range.

## *Effect of Size of Yard on Wage-Rate Distribution*

As shown in table 4, among the covered yards (with the exception of yards employing 25,000 wage earners or more) the average base rates decreased as the size of the yard increased, but the rate of decrease was less with each successive size group. The yards with 25,000 or more wage earners showed an average base rate about the same as yards with 500 to 999 wage earners.

Though yards not covered by Stabilization Agreements did not have a definite rate pattern, it is significant that the larger the yard, the less was the difference in the average base rate and in the distribution of wage earners, by wage rate, between covered and uncovered yards.

Regardless of size, in all yards, covered and not covered, the heaviest concentration of employees occurred at $1.20 an hour.

TABLE 4.—*Percentage Distribution of Shipyard Workers, by Size of Yard, Stabilization Status, and Rate of Pay, June 1943*

| Basic rate of pay | All yards | | Yards with specified numbers of wage earners | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Fewer than 100 | | 100–499 | | 500–999 | |
| | Status under Stabilization Agreements | | | | | | | |
| | Covered | Not covered | Covered | Not covered | Covered | Not covered | Covered | Not covered |
| Under $0.50 | (1) | 0.5 | 0.3 | 1.5 | 0.1 | 1.0 | (2) | 2.3 |
| $0.50 and under $0.55 | 0.1 | .5 | (2) | 2.6 | .2 | .9 | 1.1 | 2.4 |
| $0.55 and under $0.60 | .1 | .6 | .3 | 2.0 | .2 | .7 | .1 | 2.7 |
| $0.60 and under $0.65 | 1.9 | 2.1 | .9 | 3.7 | .9 | 2.6 | .2 | 2.7 |
| $0.65 and under $0.70 | 1.5 | 1.4 | .4 | 2.5 | 1.2 | 2.4 | 1.0 | 1.4 |
| $0.70 and under $0.75 | 1.1 | 3.5 | 1.2 | 2.8 | 1.6 | 3.3 | .6 | 5.1 |
| $0.75 and under $0.80 | 2.8 | 3.9 | 1.8 | 4.6 | 2.0 | 3.6 | 3.8 | 7.7 |
| $0.80 and under $0.85 | 7.5 | 7.5 | .2 | 4.9 | 5.6 | 5.1 | 4.8 | 8.4 |
| $0.85 and under $0.90 | 7.2 | 8.2 | 1.2 | 7.2 | 4.1 | 5.8 | 5.3 | 5.3 |
| $0.90 and under $0.95 | 5.0 | 7.9 | 2.1 | 5.9 | 3.3 | 6.4 | 3.2 | 4.3 |
| $0.95 and under $1.00 | 11.5 | 7.4 | 8.3 | 6.4 | 10.2 | 8.1 | 10.5 | 9.3 |
| $1.00 and under $1.05 | 5.5 | 7.6 | .7 | 9.2 | 4.9 | 6.5 | 7.2 | 4.6 |
| $1.05 and under $1.10 | 7.6 | 4.2 | 8.7 | 6.2 | 7.2 | 5.7 | 11.2 | 5.4 |
| $1.10 and under $1.15 | 5.9 | 4.3 | 2.1 | 3.5 | 4.6 | 6.1 | 5.8 | 4.4 |
| $1.15 and under $1.20 | 1.8 | .8 | 1.3 | 1.5 | .9 | 2.1 | 1.1 | 1.8 |
| $1.20 | 30.2 | 28.7 | 20.1 | 19.5 | 34.8 | 24.8 | 28.8 | 20.0 |
| $1.21 and under $1.25 | .4 | .2 | 1.2 | .1 | 1.8 | .6 | .3 | .2 |
| $1.25 and under $1.30 | 1.2 | 2.1 | 9.0 | 3.1 | 3.3 | 4.5 | .9 | 4.6 |
| $1.30 and under $1.35 | 2.9 | 2.9 | 17.9 | 3.4 | 5.0 | 4.6 | 8.4 | 1.7 |
| $1.35 and under $1.40 | 2.3 | 3.2 | 5.0 | 4.7 | 2.6 | 2.2 | 2.0 | 2.7 |
| $1.40 and under $1.45 | 1.3 | .5 | 3.4 | 1.2 | 1.2 | .8 | .1 | .4 |
| $1.45 and under $1.50 | .9 | .9 | 2.2 | .6 | 1.7 | .5 | 1.3 | .3 |
| $1.50 and over | 1.3 | 1.1 | 11.7 | 2.9 | 2.6 | 1.7 | 2.3 | 1.6 |
| All rates | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Average base rate | $1.066 | $1.040 | $1.223 | $1.021 | $1.111 | $1.048 | $1.094 | $0.991 |

| Basic rate of pay | Yards with specified numbers of wage earners | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1,000–4,999 | | 5,000–9,999 | | 10,000–24,999 | | 25,000 and over | |
| | Status under Stabilization Agreements | | | | | | | |
| | Covered | Not covered | Covered | Not covered | Covered | Not covered | Covered | Not covered |
| Under $0.50 | 0.2 | 0.2 | (2) | (2) | (1) | (2) | (2) | |
| $0.50 and under $0.55 | .6 | .1 | (1) | (2) | (2) | (2) | (2) | |
| $0.55 and under $0.60 | .1 | .5 | (1) | (2) | 0.1 | (2) | (1) | |
| $0.60 and under $0.65 | 3.6 | 5.1 | 1.1 | 0.8 | 2.7 | 0.4 | | 0.6 |
| $0.65 and under $0.70 | 2.1 | 1.3 | .9 | .2 | 2.0 | 1.6 | | 1.8 |
| $0.70 and under $0.75 | 1.9 | 2.3 | .6 | 2.9 | 1.1 | 4.3 | | 1.0 |
| $0.75 and under $0.80 | 2.3 | 3.5 | 4.2 | 4.1 | 3.6 | 2.9 | | 1.3 |
| $0.80 and under $0.85 | 5.6 | 7.9 | 9.8 | 11.0 | 7.4 | 7.1 | | 2.4 |
| $0.85 and under $0.90 | 7.5 | 7.0 | 6.6 | 7.1 | 7.6 | 12.3 | | 7.0 |
| $0.90 and under $0.95 | 4.4 | 3.3 | 4.9 | 9.6 | 5.3 | 11.9 | | 8.0 |
| $0.95 and under $1.00 | 8.7 | 9.1 | 13.2 | 4.6 | 11.2 | 7.5 | | 12.2 |
| $1.00 and under $1.05 | 6.2 | 2.0 | 5.4 | 17.1 | 5.2 | 5.7 | | 5.7 |
| $1.05 and under $1.10 | 8.0 | 5.3 | 8.2 | .6 | 7.5 | 3.1 | | 7.3 |
| $1.10 and under $1.15 | 6.7 | 1.7 | 4.1 | 5.7 | 5.3 | 4.1 | | 7.4 |
| $1.15 and under $1.20 | 1.4 | .8 | 1.5 | .3 | 1.5 | (2) | | 2.4 |
| $1.20 | 26.9 | 37.9 | 31.1 | 29.5 | 30.6 | 28.9 | | 30.2 |
| $1.21 and under $1.25 | .3 | .3 | .3 | (1) | .2 | (1) | | .3 |
| $1.25 and under $1.30 | 1.4 | 1.5 | 1.1 | .8 | 1.0 | 1.1 | | 1.3 |
| $1.30 and under $1.35 | 6.9 | 5.3 | 2.5 | 1.6 | 2.7 | 1.8 | | 1.6 |
| $1.35 and under $1.40 | 1.5 | 2.4 | 1.7 | 3.7 | 2.2 | 3.9 | | 3.0 |
| $1.40 and under $1.45 | 1.2 | .6 | .7 | .2 | 1.0 | .6 | | 2.3 |
| $1.45 and under $1.50 | .8 | .9 | 1.0 | (2) | .9 | 1.9 | | 1.9 |
| $1.50 and over | 1.7 | 1.0 | 1.1 | .2 | .9 | .9 | | 1.7 |
| All rates | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 |
| Average base rate | $1.063 | $1.137 | $1.059 | $1.037 | $1.053 | $1.043 | | $1.086 |

[1] Less than a tenth of 1 percent.
[2] No employees reported in this range.

In covered yards with fewer than 100 employees the largest groups of workers were receiving rates above $1.30 an hour and less than 30 percent were paid rates below $1.20; however, as these yards accounted for less than 1 percent of the total employment, their rate distribution is not especially important. It should be observed that this group of establishments is heavily weighted by small Pacific Coast repair yards paying a rate differential. Furthermore, the wage-rate schedules of such small yards frequently include employers acting in the capacity of working supervisors, a factor which also tends to increase the average rate. The fact that covered yards with more than 1,000 wage earners employed 98 percent of all covered workers (or 88 percent of the total employment in the sample) and that yards with 10,000 or more workers employed 72 percent of this covered total, indicates the relatively small effect of the rates paid by yards with fewer than 100 employees on the average for all reporting yards.

### *Effect of Type of Operation on Wage-Rate Distribution*

During normal periods new-construction yards build vessels to individual order and repair yards engage in the reconstruction of disabled vessels and in routine overhauling to keep ships in seaworthy condition. The advent of war changed this situation. New-construction yards still build vessels under contract, but now a single contract may call for enough ships to keep a greatly expanded yard continuously busy. Commercial repair yards are now assigned the job of assisting in the maintenance of the battle fleet and reconstructing merchant vessels damaged by enemy action.

A large number of yards engaged primarily in new construction also carry on repair work and in so doing may within the period of a week, or even a day, shift workers from one type of work to another. It was therefore deemed advisable in presenting data in table 5 to group these yards with those engaged solely in new construction.

Employees doing comparable work on repair jobs are paid the same hourly base rate as those engaged in new construction except in yards located on the West Coast from San Francisco northward. The master labor agreement for repair work in this area provides that standard skilled mechanics be paid $1.34 (specifically an increase of 11.6 percent over the new-construction base rate), and it allows for proportionate increases in the base rates of all other employees.

The June 1943 occupational wage-rate schedules showed the average base rate in repair yards for all regions to be lower than that for new construction—$1.025 as contrasted with $1.067.

On the Atlantic Coast, the first large concentration of employees was between $0.80 and under $0.85 an hour for both types of yards. Although repair yards showed a larger proportion of employees at $1.20 an hour and new construction yards reported comparatively more employees at rates over $1.50, there was a difference of only $\frac{7}{10}$ of a cent ($0.007) in the average base rate of the two groups.

On the Gulf Coast 5 out of every 10 employees working solely on repair as against only 3 out of every 10 in new-construction yards were reported at rates under $0.80. At the same time proportionately more wage earners in new-construction yards were receiving $1.20 an hour. Consequently, though both groups showed slightly more than 5 percent of their workers receiving over $1.25 an hour, the average

base hourly rate was $0.074 an hour higher in new-construction yards. Despite this over-all difference, some individual repair yards on the Gulf Coast had higher average base rates than did some of the individual construction yards in this region.

TABLE 5.—*Percentage Distribution of Shipyard Workers, by Region, Type of Construction, and Rate of Pay, June 1943*

| Basic rate group | All regions | | Atlantic Coast | | Gulf Coast | | Pacific Coast | | Great Lakes | | Inland |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Construction and repair | Repair only | Construction and repair | Repair only | Construction and repair | Repair only | Construction and repair | Repair only | Construction and repair | Repair only | Construction and repair |
| Under $0.50 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | (1) | (2) | 0.4 | (2) | 0.4 |
| $0.50 and under $0.55 | .1 | .5 | .2 | .6 | .1 | .4 | (1) | (2) | .1 | (2) | .3 |
| $0.55 and under $0.60 | .1 | .3 | .2 | .2 | .2 | 1.8 | (1) | (2) | .1 | 0.1 | .2 |
| $0.60 and under $0.65 | 1.9 | 1.9 | 2.0 | .1 | 8.9 | 15.6 | 0.1 | (2) | 1.1 | .4 | 1.6 |
| $0.65 and under $0.70 | 1.4 | 2.2 | 1.7 | .5 | 6.3 | 16.0 | (1) | (1) | .9 | .2 | .8 |
| $0.70 and under $0.75 | 1.4 | 1.1 | 2.8 | 1.1 | .6 | 2.3 | .1 | (2) | 3.3 | 1.6 | 1.8 |
| $0.75 and under $0.80 | 2.8 | 4.8 | 2.3 | 4.0 | 13.3 | 15.8 | (1) | (1) | 3.4 | 4.0 | 5.0 |
| $0.80 and under $0.85 | 6.9 | 14.1 | 13.5 | 18.8 | 6.7 | 1.7 | .1 | (1) | 9.3 | 14.7 | 13.0 |
| $0.85 and under $0.90 | 6.9 | 12.4 | 11.1 | 16.4 | 4.7 | 3.4 | 3.4 | 0.3 | 7.4 | 4.9 | 7.6 |
| $0.90 and under $0.95 | 5.4 | 3.5 | 8.7 | 4.3 | 3.7 | 1.8 | 2.0 | .2 | 8.7 | 7.0 | 10.6 |
| $0.95 and under $1.00 | 11.6 | 5.5 | 8.0 | 5.6 | 5.3 | 2.2 | 18.0 | 8.2 | 5.1 | 2.5 | 5.2 |
| $1.00 and under $1.05 | 5.6 | 7.4 | 10.0 | 9.4 | 3.0 | 2.8 | 1.2 | .8 | 11.2 | 6.2 | 9.1 |
| $1.05 and under $1.10 | 7.1 | 8.3 | 5.9 | 7.0 | 5.9 | 1.2 | 9.5 | 21.1 | 5.6 | 1.8 | .6 |
| $1.10 and under $1.15 | 6.0 | 3.1 | 8.3 | 3.6 | 2.3 | 1.4 | 4.7 | 1.8 | 7.7 | 3.6 | 5.5 |
| $1.15 and under $1.20 | 1.7 | 1.8 | 1.5 | 2.3 | .6 | (1) | 2.3 | 1.1 | 1.3 | .5 | .2 |
| $1.20 | 31.0 | 18.9 | 16.0 | 20.0 | 32.2 | 22.8 | 44.8 | 7.2 | 27.1 | 42.1 | 30.3 |
| $1.21 and under $1.25 | .3 | .4 | .4 | .2 | (1) | (1) | .5 | 1.9 | .2 | .1 | .1 |
| $1.25 and under $1.30 | 1.2 | 1.9 | 1.7 | 1.1 | .7 | 5.4 | 1.0 | 3.1 | 1.1 | 2.4 | 1.2 |
| $1.30 and under $1.35 | 2.4 | 8.8 | 1.2 | 2.5 | 4.4 | 3.7 | 2.9 | 45.5 | 2.6 | 5.2 | 2.0 |
| $1.35 and under $1.40 | 2.5 | 1.0 | 1.1 | 1.2 | .3 | .4 | 4.4 | .5 | 1.7 | 1.1 | 2.9 |
| $1.40 and under $1.45 | 1.3 | .5 | 1.1 | .4 | .3 | 1.0 | 1.9 | .9 | .7 | .5 | .7 |
| $1.45 and under $1.50 | 1.0 | .6 | .6 | .4 | .3 | (1) | 1.5 | 2.7 | .3 | (1) | 1.6 |
| $1.50 and over | 1.3 | .9 | 1.6 | .2 | .1 | .2 | 1.6 | 4.7 | .7 | .8 | .2 |
| All rates | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Average base rate | $1.067 | $1.025 | $1.008 | $1.001 | $0.986 | $0.912 | $1.148 | $1.233 | $1.039 | $1.074 | $1.035 |

[1] Less than a tenth of 1 percent.
[2] No employees reported in this range.

The distribution of employees in Pacific Coast yards is influenced by the existence of specific labor agreements for both types of yards and the provision for a repair differential. Because of this, construction yards listed cumulative percentages of 23.7, 86.2, and 90.6 of their employees at rates under $1, at $1.20 and less, and under $1.35, while repair yards listed 8.7, 40.7, and 91.2 percent of their employees at these same rates. Largely because of the repair differential, there was a difference of $0.085 an hour in the average base rate for the two classes of yards in this region, with repair yards averaging $1.233 and yards on new construction or new construction and repair $1.148.

Yards on the Great Lakes followed a pattern of their own. The repair yards in this region listed proportionately more employees at the first large concentration for both groups ($0.80 and under $0.85) and a considerably greater percentage at $1.20 an hour. Nevertheless, there were only about three points difference between the percentages of wage earners in repair yards and in construction yards paid at the rate of $1.20 or less, and the two types of yards listed practically the same proportion of wage earners at rates of $1.35 and over. As on the Pacific Coast, however, repair yards in this region showed a higher average base rate, though the difference in this case was only $0.035 an hour. There were no Inland yards engaged solely in repair.

## *Occupational Variation in Wage Rates*

Twenty-four of the 31 occupations for which first-class workers are listed in table 6 received rates closely approximating the $1.20 (from $1.190 to $1.220) established by zone standards. The average base rate in covered yards for first-class mechanics ranged from $0.985 for bolters, considered a semiskilled occupation, to $1.396 for patternmakers, who are among the most highly skilled of shipyard workers. In yards not covered by Stabilization Agreements, the lowest rate was again received by bolters ($1.003), while loftsmen topped the scale with a rate of $1.279.

The average base rate in covered yards for "other classes" of mechanics ranged from $0.938 for bolters to $1.111 for patternmakers. Rates in yards outside the Stabilization Agreements ranged from a low of $0.919 for plate-shop machinists to $1.088 for anglesmiths. The fact that the average rate paid to bolters other than the first class in yards not covered ($1.078 an hour) is $0.075 higher than the average rate paid to first-class men in this occupation is the result of the predominance of "other classes" of bolters on the Pacific Coast, whereas the first-class men were concentrated in areas paying lower rates.

TABLE 6.—*Average Base Rate per Hour for Specified Occupations in Shipyards, by Region and Stabilization Status, June 1943*

| Occupation and class | All regions | | Atlantic Coast | | Gulf Coast | | Pacific Coast | | Great Lakes | | Inland |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Statues under Stabilization Agreements | | | | | | | | | | |
| | Covered | Not covered | Covered | Not covered | Covered | Not covered | Covered | Not covered | Covered | Not covered | Not covered |
| All occupations | $1.059 | $1.031 | $1.003 | $0.968 | $0.971 | $0.971 | $1.143 | $1.166 | $1.037 | $1.017 | $1.028 |
| Selected occupations | 1.062 | 1.035 | 1.005 | .970 | .974 | .974 | 1.148 | 1.167 | 1.041 | 1.024 | 1.034 |
| Anglesmith | 1.140 | 1.137 | 1.085 | (1) | 1.187 | (2) | 1.144 | (1) | 1.158 | (2) | 1.127 |
| First class | 1.298 | 1.185 | 1.233 | (1) | 1.336 | (2) | 1.308 | (1) | 1.275 | (2) | (1) |
| Other classes | 1.090 | 1.088 | 1.018 | (1) | 1.036 | (2) | 1.101 | (1) | 1.016 | (2) | (1) |
| Anglesmith's helper | .958 | .801 | .873 | (1) | .792 | (2) | 1.075 | (2) | (1) | (2) | (1) |
| Apprentice | .815 | .863 | .799 | .666 | .790 | .874 | 1.046 | .999 | .869 | .675 | .726 |
| Blacksmith | 1.113 | 1.099 | 1.082 | 1.051 | 1.074 | 1.051 | 1.205 | 1.203 | 1.169 | 1.113 | 1.089 |
| First class | 1.221 | 1.148 | 1.229 | 1.110 | 1.207 | (1) | 1.218 | 1.212 | 1.207 | 1.181 | 1.116 |
| Other classes | 1.000 | .952 | 1.008 | .979 | .861 | (1) | 1.066 | (1) | (1) | (1) | (1) |
| Blacksmith's helper | .878 | .827 | .847 | .758 | .797 | (1) | .973 | (1) | .906 | (1) | .847 |
| Boilermaker | 1.142 | 1.199 | 1.059 | 1.114 | 1.134 | 1.205 | 1.203 | 1.306 | 1.139 | (1) | 1.200 |
| First class | 1.224 | 1.224 | 1.204 | 1.206 | 1.201 | 1.250 | 1.239 | 1.309 | 1.204 | (1) | 1.200 |
| Other classes | 1.027 | .976 | 1.002 | .982 | .994 | .947 | 1.095 | (1) | 1.025 | (1) | (2) |
| Boilermaker's helper | .896 | .794 | .826 | .753 | .727 | .754 | .961 | (1) | .891 | (1) | .858 |
| Bolter | .950 | 1.061 | .909 | (1) | 1.033 | (2) | .995 | 1.085 | .978 | (2) | .927 |
| First class | .985 | 1.003 | .921 | (1) | 1.070 | (2) | 1.040 | 1.122 | .973 | (2) | .930 |
| Other classes | .938 | 1.078 | .907 | (1) | .948 | (2) | .988 | 1.081 | .984 | (2) | (1) |
| Bolter's helper | .860 | (1) | .816 | (2) | (1) | (2) | .950 | (1) | .765 | (2) | (2) |
| Burner | 1.140 | 1.144 | 1.090 | 1.141 | 1.104 | 1.140 | 1.186 | 1.215 | 1.138 | 1.163 | 1.128 |
| First class | 1.202 | 1.200 | 1.191 | 1.193 | 1.200 | 1.194 | 1.206 | 1.239 | 1.194 | 1.199 | 1.195 |
| Other classes | 1.033 | .999 | 1.029 | 1.014 | .973 | (1) | 1.083 | 1.094 | 1.052 | .998 | .987 |
| Burner's helper | .832 | .806 | .812 | .743 | .725 | (1) | .952 | (1) | .944 | .968 | .839 |
| Carpenter and shipwright | 1.175 | 1.163 | 1.096 | 1.091 | 1.181 | 1.192 | 1.208 | 1.206 | 1.149 | .983 | 1.176 |
| First class | 1.207 | 1.203 | 1.201 | 1.181 | 1.202 | 1.199 | 1.209 | 1.210 | 1.198 | 1.198 | 1.191 |
| Other classes | 1.023 | .973 | 1.017 | .982 | 1.024 | .916 | 1.074 | 1.098 | 1.062 | .934 | .854 |
| Carpenter and shipwright's helper | .924 | .895 | .757 | .794 | .723 | .720 | .952 | .982 | .992 | (1) | (1) |
| Chipper and caulker | 1.115 | 1.119 | 1.074 | 1.071 | 1.134 | 1.093 | 1.169 | 1.218 | 1.138 | 1.105 | 1.122 |
| First class | 1.195 | 1.178 | 1.176 | 1.117 | 1.200 | 1.183 | 1.212 | 1.269 | 1.184 | 1.190 | 1.180 |
| Other classes | 1.020 | .987 | .999 | .953 | .904 | (1) | 1.082 | 1.040 | 1.044 | 1.014 | .987 |
| Chipper and caulker's helper | .840 | .891 | .799 | .748 | .719 | (2) | .951 | (1) | .861 | .992 | (1) |
| Coppersmith | 1.141 | (1) | 1.131 | (1) | 1.050 | (1) | 1.165 | (1) | (1) | (2) | (2) |
| First class | 1.248 | (1) | 1.338 | (1) | 1.204 | (1) | 1.216 | (1) | (1) | (2) | (2) |
| Other classes | 1.030 | (2) | 1.028 | (2) | .942 | (2) | 1.065 | (2) | (2) | (2) | (2) |

TABLE 6.—*Average Base Rate per Hour for Specified Occupations in Shipyards, by Region and Stabilization Status, June 1943*—Continued

| Occupation and class | All regions | | Atlantic Coast | | Gulf Coast | | Pacific Coast | | Great Lakes | | Inland |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Status under Stabilization Agreements | | | | | | | | | | |
| | Covered | Not covered | Covered | Not covered | Covered | Not covered | Covered | Not covered | Covered | Not covered | Not covered |
| Coppersmith's helper | $0.880 | (1) | $0.793 | (1) | $0.702 | (2) | $0.952 | (1) | (2) | (2) | (2) |
| Crane follower | .982 | $0.888 | .926 | $0.920 | .897 | (2) | 1.077 | $1.091 | $0.950 | $0.824 | $0.879 |
| Crane operator, under 20 tons | 1.150 | 1.116 | 1.115 | .953 | 1.006 | $1.179 | 1.224 | 1.265 | 1.156 | 1.099 | 1.076 |
| First class | 1.194 | 1.166 | 1.178 | 1.159 | 1.105 | 1.197 | 1.228 | 1.272 | 1.175 | 1.101 | 1.116 |
| Other classes | 1.042 | .939 | 1.033 | .798 | 1.039 | (1) | 1.162 | (1) | 1.067 | (1) | .988 |
| Crane operator's helper, under 20 tons | .833 | .743 | .831 | (1) | .800 | (1) | (1) | (1) | .930 | (2) | .894 |
| Crane operator, 20 tons and over | 1.254 | 1.242 | 1.217 | 1.284 | 1.181 | (1) | 1.330 | 1.358 | 1.186 | (2) | 1.191 |
| First class | 1.278 | 1.258 | 1.242 | 1.289 | 1.228 | (1) | 1.330 | 1.358 | 1.208 | (2) | 1.210 |
| Other classes | 1.057 | 1.073 | 1.081 | (1) | 1.028 | (2) | (2) | (2) | (1) | (2) | 1.062 |
| Crane operator's helper, 20 tons and over | .896 | (2) | (1) | (2) | .898 | (2) | (2) | (2) | (1) | (2) | (2) |
| Driller | 1.044 | 1.024 | 1.013 | (1) | 1.118 | (1) | 1.084 | 1.092 | .983 | (1) | .898 |
| First class | 1.108 | 1.057 | 1.112 | (1) | 1.142 | (2) | 1.105 | 1.099 | .994 | (2) | (1) |
| Other classes | 1.016 | .987 | .964 | (1) | 1.064 | (1) | 1.078 | 1.083 | .952 | (1) | (1) |
| Driller's helper | .886 | .804 | .777 | (1) | .746 | (2) | .950 | (1) | .896 | .780 | (2) |
| Electrician | 1.132 | 1.159 | 1.066 | 1.135 | 1.104 | 1.072 | 1.189 | 1.264 | 1.162 | 1.125 | 1.162 |
| First class | 1.211 | 1.210 | 1.200 | 1.187 | 1.200 | 1.189 | 1.217 | 1.278 | 1.197 | 1.198 | 1.197 |
| Other classes | 1.015 | 1.009 | 1.008 | 1.000 | .990 | .888 | 1.051 | 1.102 | 1.076 | 1.004 | 1.044 |
| Electrician's helper | .877 | .905 | .831 | .788 | .711 | .755 | .952 | 1.012 | .890 | .938 | .898 |
| Erector | 1.027 | 1.118 | 1.024 | 1.051 | 1.002 | 1.198 | (2) | 1.194 | 1.056 | 1.043 | .976 |
| First class | 1.163 | 1.173 | 1.169 | 1.200 | 1.071 | 1.199 | (2) | 1.202 | 1.132 | 1.155 | 1.021 |
| Other classes | .962 | .953 | .956 | .958 | .941 | (1) | (2) | 1.082 | 1.021 | .921 | .947 |
| Erector's helper | .749 | .874 | .721 | (2) | (1) | (1) | (2) | .950 | .824 | (1) | .697 |
| Fireman, plant protection | .856 | .846 | .831 | .814 | .677 | (1) | .939 | .972 | (1) | .855 | .853 |
| Foreman | 1.512 | 1.378 | 1.580 | 1.358 | 1.302 | 1.325 | 1.502 | 1.493 | 1.438 | 1.306 | 1.378 |
| Furnaceman | 1.103 | 1.113 | 1.099 | (1) | (1) | (2) | 1.108 | (1) | (1) | 1.064 | (1) |
| First class | 1.193 | 1.204 | 1.235 | (1) | (1) | (2) | 1.108 | (1) | (1) | (1) | (1) |
| Other classes | 1.044 | 1.014 | 1.042 | (2) | (1) | (2) | (2) | (2) | (1) | 1.014 | (2) |
| Furnaceman's helper | .923 | .758 | .929 | .740 | .786 | (2) | (1) | (2) | .992 | (2) | (1) |
| Handyman, general | .944 | .934 | .944 | .910 | (2) | (2) | (2) | (2) | (1) | (1) | .908 |
| Helper, general | .840 | .849 | .827 | .801 | .721 | .656 | .969 | .988 | .812 | (1) | .851 |
| Instructor | 1.276 | 1.304 | 1.250 | 1.406 | (2) | (2) | 1.279 | 1.279 | (1) | (2) | 1.349 |
| Joiner | 1.159 | 1.088 | 1.137 | 1.025 | 1.184 | .995 | 1.193 | 1.257 | 1.190 | 1.092 | 1.190 |
| First class | 1.208 | 1.164 | 1.206 | 1.107 | 1.200 | (1) | 1.212 | 1.257 | 1.198 | 1.171 | 1.200 |
| Other classes | 1.049 | 1.004 | 1.057 | .951 | (1) | (1) | .926 | (2) | 1.126 | 1.039 | (1) |
| Joiner's helper | .879 | .853 | .793 | .798 | (1) | (1) | .956 | .968 | (1) | (1) | (1) |
| Laborer | .764 | .762 | .754 | .692 | .630 | .616 | .887 | .910 | .780 | .790 | .787 |
| Layer-out man | 1.173 | 1.190 | 1.128 | (1) | 1.096 | (1) | 1.321 | 1.290 | .997 | 1.193 | 1.158 |
| First class | 1.267 | 1.248 | 1.236 | (2) | 1.200 | (2) | 1.324 | 1.315 | (1) | 1.300 | 1.226 |
| Other classes | 1.010 | .995 | 1.031 | (2) | .980 | (1) | (1) | (1) | .950 | (1) | .932 |
| Layer-out man's helper | .800 | (1) | .850 | (1) | .713 | (2) | .950 | (1) | (1) | (1) | (1) |
| Leaderman | 1.336 | 1.271 | 1.328 | 1.270 | 1.258 | 1.306 | 1.359 | 1.364 | 1.285 | 1.200 | 1.217 |
| Learner | .864 | .878 | .844 | .913 | .723 | (2) | 1.090 | .993 | .927 | .859 | .756 |
| Loftsman | 1.250 | 1.182 | 1.163 | (1) | 1.215 | (1) | 1.320 | 1.268 | 1.162 | 1.155 | 1.123 |
| First class | 1.341 | 1.279 | 1.379 | (1) | 1.398 | (1) | 1.332 | (1) | 1.232 | (1) | 1.227 |
| Other classes | 1.053 | 1.086 | 1.030 | (1) | 1.110 | (1) | 1.125 | (1) | 1.044 | 1.112 | .966 |
| Loftsman's helper | .894 | (1) | .785 | (1) | .709 | (2) | .952 | (2) | .925 | (1) | (1) |
| Machinist, outside and inside | 1.132 | 1.120 | 1.087 | 1.084 | 1.103 | 1.145 | 1.208 | 1.232 | 1.124 | 1.060 | 1.108 |
| First class | 1.213 | 1.200 | 1.200 | 1.163 | 1.199 | 1.227 | 1.224 | 1.253 | 1.191 | 1.196 | 1.184 |
| Other classes | 1.029 | .987 | 1.026 | .930 | .985 | .977 | 1.087 | 1.097 | 1.063 | .943 | 1.016 |
| Machinist's helper | .879 | .847 | .829 | .749 | .728 | .725 | .961 | .998 | .847 | .946 | .778 |
| Molder | 1.181 | (1) | 1.170 | (1) | (1) | (1) | (1) | (1) | (2) | (1) | (1) |
| First class | 1.237 | (1) | 1.228 | (1) | (1) | (2) | (1) | (1) | (2) | (2) | (1) |
| Other classes | 1.070 | (1) | 1.070 | (2) | (2) | (1) | (2) | (2) | (2) | (1) | (1) |
| Molder's helper | .844 | (1) | .844 | (1) | (2) | (2) | (2) | (2) | (2) | (2) | (1) |
| Painter | 1.142 | 1.100 | 1.077 | .990 | 1.170 | 1.000 | 1.202 | 1.219 | 1.124 | 1.123 | 1.120 |
| First class | 1.202 | 1.184 | 1.201 | 1.122 | 1.200 | 1.103 | 1.203 | 1.234 | 1.194 | 1.198 | 1.187 |
| Other classes | 1.007 | .954 | 1.007 | .855 | .988 | .951 | 1.111 | 1.126 | .993 | .959 | .998 |
| Painter's helper | .862 | .881 | .833 | .737 | .737 | (1) | .950 | .936 | .873 | .958 | .830 |
| Patternmaker | 1.374 | (1) | 1.331 | (1) | (1) | (1) | 1.551 | (1) | 1.449 | (1) | (1) |
| First class | 1.396 | (1) | 1.353 | (1) | (1) | (1) | 1.567 | (1) | 1.458 | (1) | (1) |
| Other classes | 1.111 | (1) | 1.105 | (1) | (2) | (2) | (1) | (2) | (1) | (2) | (2) |
| Patternmaker's helper | .845 | (2) | (1) | (2) | (2) | (2) | (1) | (2) | (1) | (2) | (2) |
| Pipecoverer | 1.067 | 1.166 | 1.063 | (1) | 1.078 | (2) | (1) | (2) | (1) | 1.209 | 1.134 |
| First class | 1.219 | 1.199 | 1.229 | (1) | 1.200 | (2) | (1) | (2) | (1) | 1.209 | 1.206 |
| Other classes | 1.004 | 1.030 | 1.011 | (2) | .926 | (2) | (2) | (2) | (1) | (2) | 1.080 |
| Pipecoverer's helper | .900 | (2) | .900 | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) |

TABLE 6.—*Average Base Rate per Hour for Specified Occupations in Shipyards, by Region and Stabilization Status, June 1943*—Continued

| Occupation and class | All regions | | Atlantic Coast | | Gulf Coast | | Pacific Coast | | Great Lakes | | Inland |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Status under Stabilization Agreements | | | | | | | | | | |
| | Covered | Not covered | Covered | Not covered | Covered | Not covered | Covered | Not covered | Covered | Not covered | Not covered |
| Pipefitter | $1.131 | $1.144 | $1.077 | $1.113 | $1.104 | $1.127 | $1.193 | $1.247 | $1.109 | $1.120 | $1.157 |
| First class | 1.203 | 1.201 | 1.194 | 1.177 | 1.200 | 1.200 | 1.210 | 1.273 | 1.175 | 1.197 | 1.196 |
| Other classes | 1.019 | 1.019 | 1.015 | .980 | .994 | 1.022 | 1.074 | 1.119 | 1.003 | 1.032 | 1.011 |
| Pipefitter's helper | .876 | .853 | .823 | .778 | .720 | .742 | .957 | 1.004 | .839 | .929 | .841 |
| Plate-shop machine operator | 1.084 | .989 | 1.050 | 1.026 | 1.024 | (1) | 1.138 | (1) | 1.103 | .950 | .988 |
| First class | 1.159 | 1.086 | 1.141 | (1) | 1.123 | (2) | 1.188 | (1) | 1.124 | 1.030 | 1.093 |
| Other classes | 1.022 | .919 | .999 | (1) | .938 | (1) | 1.080 | (1) | 1.063 | .861 | .923 |
| Plate-shop helper | .852 | .778 | .844 | (1) | .690 | (1) | .953 | (2) | .853 | (1) | .772 |
| Regulator and plate hanger | 1.081 | 1.170 | 1.002 | (1) | .850 | (2) | 1.141 | (1) | 1.019 | (1) | (1) |
| First class | 1.094 | 1.189 | 1.045 | (1) | (2) | (2) | 1.184 | (1) | 1.075 | (1) | (1) |
| Other classes | 1.073 | (1) | .932 | (1) | .850 | (2) | 1.128 | (2) | .968 | (1) | (1) |
| Regulator's helper | .759 | (1) | .707 | (1) | (2) | (2) | .950 | (2) | .773 | (2) | (1) |
| Rigger | 1.111 | 1.119 | 1.050 | 1.115 | 1.124 | 1.119 | 1.169 | 1.221 | 1.068 | 1.050 | 1.098 |
| First class | 1.172 | 1.205 | 1.131 | 1.187 | 1.200 | 1.190 | 1.188 | 1.241 | 1.100 | 1.190 | 1.197 |
| Other classes | 1.039 | .985 | 1.006 | .914 | .988 | (1) | 1.123 | 1.125 | 1.031 | .971 | 1.020 |
| Rigger's helper | .780 | .852 | .776 | .793 | .732 | (1) | .950 | (1) | .960 | .914 | .827 |
| Riveter | 1.166 | 1.038 | 1.142 | (1) | 1.179 | (2) | 1.205 | (1) | 1.199 | (1) | .915 |
| First class | 1.204 | 1.119 | 1.198 | (1) | 1.200 | (2) | 1.214 | (1) | 1.199 | (1) | (1) |
| Other classes | 1.048 | (1) | 1.040 | (1) | (1) | (2) | 1.106 | (2) | (1) | (1) | (1) |
| Riveter's helper | .868 | (2) | .824 | (2) | .750 | (2) | .950 | (2) | (2) | (2) | (2) |
| Rivet heater | .910 | (1) | .833 | (2) | (1) | (2) | 1.075 | (2) | (1) | (1) | (2) |
| Rivet holder | 1.024 | .826 | .988 | (2) | (1) | (2) | 1.114 | (1) | 1.013 | (1) | .782 |
| Rivet passer | .824 | (1) | .802 | (2) | (2) | (2) | .947 | (2) | .777 | (2) | (1) |
| Sheet-metal worker | 1.117 | 1.142 | 1.077 | 1.113 | 1.103 | 1.116 | 1.172 | 1.249 | 1.165 | 1.197 | 1.117 |
| First class | 1.207 | 1.186 | 1.209 | 1.176 | 1.200 | 1.181 | 1.208 | 1.346 | 1.201 | 1.200 | 1.152 |
| Other classes | 1.026 | 1.046 | 1.019 | 1.003 | .982 | 1.014 | 1.072 | (1) | 1.065 | (1) | 1.072 |
| Sheet-metal helper | .895 | .871 | .820 | .790 | .705 | .693 | .954 | (1) | .869 | 1.000 | .858 |
| Shipfitter | 1.125 | 1.113 | 1.055 | 1.134 | 1.100 | 1.019 | 1.188 | 1.196 | 1.105 | 1.145 | 1.106 |
| First class | 1.206 | 1.202 | 1.214 | 1.190 | 1.199 | 1.208 | 1.206 | 1.241 | 1.186 | 1.200 | 1.198 |
| Other classes | 1.019 | 1.006 | 1.005 | .999 | 1.000 | .945 | 1.091 | 1.085 | 1.044 | 1.034 | 1.013 |
| Shipfitter's helper | .879 | .840 | .822 | .777 | .710 | .737 | .951 | 1.028 | .899 | .981 | .865 |
| Stagebuilder | 1.032 | 1.131 | .952 | (1) | (1) | (1) | 1.086 | 1.185 | .924 | (2) | 1.079 |
| Supervisor | 1.610 | 1.503 | 1.588 | 1.456 | 1.503 | (1) | 1.648 | 1.702 | 1.555 | (1) | 1.417 |
| Tank scaler | .881 | .872 | .825 | .828 | .711 | (2) | .941 | (1) | .900 | .790 | .895 |
| Tool and die maker | 1.152 | 1.219 | 1.062 | (1) | (1) | (2) | 1.345 | (1) | (1) | 1.204 | (1) |
| First class | 1.300 | 1.219 | 1.246 | (1) | (1) | (2) | 1.345 | (1) | (1) | 1.204 | (1) |
| Other classes | .955 | (2) | .955 | (2) | (2) | (2) | (2) | (2) | (2) | (2) | (2) |
| Tool and die maker's helper | .758 | (1) | .754 | (2) | (2) | (2) | (1) | (2) | (2) | (1) | (2) |
| Truck driver | 1.008 | .921 | .951 | .766 | .810 | .807 | 1.068 | 1.065 | .944 | .974 | .963 |
| Watchman and guard | .865 | .779 | .841 | .662 | .724 | .589 | .960 | .884 | .794 | .827 | .824 |
| Welder | 1.125 | 1.094 | 1.075 | 1.095 | 1.095 | 1.141 | 1.165 | 1.212 | 1.130 | .995 | 1.093 |
| First class | 1.214 | 1.201 | 1.232 | 1.185 | 1.202 | 1.218 | 1.210 | 1.232 | 1.202 | 1.199 | 1.193 |
| Other classes | 1.020 | .959 | 1.002 | .965 | .972 | .983 | 1.064 | 1.107 | 1.020 | .740 | .991 |
| Welder's helper | .865 | .828 | .805 | .776 | .712 | .710 | .953 | .919 | .853 | .996 | .774 |
| All others | .985 | .932 | .973 | .909 | .865 | .889 | 1.027 | 1.081 | .955 | .918 | .913 |

[1] Number of workers too small to justify presentation of an average.
[2] No employees reported for this class.

Among the "other classes" of mechanics, only patternmakers in covered yards averaged more than $1.10 an hour. Of the 31 occupations which include "other classes," 28 averaged over $1 an hour, while 30 received over $0.95 an hour. None of these average rates in covered or not-covered yards fell below $0.90 an hour. In yards outside the Stabilization Agreements the "other classes" of mechanics in only 11 occupations received over $1 an hour, whereas those in 23 occupations received hourly rates of over $0.95.

Helpers received an average base rate of over $0.80 an hour in 28 of the 32 occupations for which helpers were listed in covered shipyards. They received an average of over $0.75 in 31 of the occupations and not less than $0.70 an hour in all 32. In yards not covered by the Stabilization Agreements, also, helpers in all occupations re-

ceived at least $0.70 an hour, in 20 they received at least $0.75, and in 17 at least $0.80. The rates in covered yards ranged from $0.749 for erectors' helpers to $0.958 paid anglesmiths' helpers. In not-covered yards the range was from $0.743 for crane operators' helpers, under 20 tons to $0.905 an hour for electricians' helpers.

*First-class mechanics.*—Table 6 bears out the fact suggested by previous tables, that little uniformity in rates exists between the regions for other than first-class craftsmen. Although the zone agreements did not list occupations in which first-class mechanics were to be paid $1.20, there was some degree of consistency between the regions as to the occupations paid this rate. Of the occupations for which sufficiently large numbers of first-class mechanics were reported to warrant computing an average, Atlantic Coast covered yards listed 22 occupations with men receiving $1.19 or over, while the Pacific Coast, Gulf Coast, and the Great Lakes regions reported 20, 19, and 13 occupations, respectively. Yards not covered by zone agreements listed, for the same areas, 5, 18, 11, and 13 occupations in which first-class men averaged $1.19 or over. Inland yards, none of which is covered, listed 13 such occupations.

From analysis of the rates listed on the June 18, 1943, wage-rate schedules it appears that the following 25 occupations are paid the standard for skilled crafts:

| | | |
|---|---|---|
| Anglesmith. | Furnaceman. | Pipecoverer. |
| Blacksmith. | Joiner. | Pipefitter. |
| Boilermaker. | Layer-out. | Rigger. |
| Burner. | Loftsman. | Riveter. |
| Carpenter (shipwright). | Machinist, outside and inside. | Sheet-metal worker. |
| Chipper and caulker. | Molder. | Shipfitter. |
| Coppersmith. | Painter. | Tool and die maker. |
| Crane operator. | Patternmaker. | Welder. |
| Electrician. | | |

*Other classes of mechanics.*—The variation in average base rates paid mechanics other than first class, exemplifies further the lack of uniformity in regional shipyard structures caused by failure up to June 1943, in all zones except the Pacific,[15] to establish zone rates for these other classes.

Shipyards on the West Coast maintained the highest base rates for "other classes" of mechanics. Such workers in covered yards in this region averaged over $1 an hour in 20 occupations, while in the yards not covered they averaged above $1 in 13 occupations. Covered shipyards on the Atlantic Coast, Great Lakes, and Gulf Coast reported 24, 17, and 7 occupations, respectively, in which mechanics below first class received more than $1 an hour. The yards not covered by Stabilization Agreements showed a slightly different structure, reporting "other classes" of mechanics averaging over $1 as follows: Great Lakes, 7 occupations; Inland, 8 occupations; Gulf Coast, 3 occupations; and Atlantic Coast, 3 occupations.

There appears to be no conformity between regions as to the specific occupations in the classes below first class that commanded the minimum or the maximum base rate. For example, taking covered yards first, it was the layers-out in the Great Lakes zone who were paid the least of all the occupational groups in the classes considered ($0.950). On the Pacific Coast it was the joiners ($0.926),

[15] See p. 404 for agreements reached and War Labor Board orders, made since June 1943, that set rates for other than standard skilled mechanics.

on the Atlantic Coast the bolters ($0.907), and on the Gulf Coast the regulators ($0.850). In not-covered yards the chippers and caulkers received least on the Pacific Coast ($1.040), electricians on the Gulf Coast ($0.888), carpenters in the Inland region ($0.854), crane operators on cranes of under 20 tons on the Atlantic Coast ($0.798), and welders on the Great Lakes ($0.740).

The same lack of uniformity occurred when rates at the top of the scale were considered. In covered yards, crane operators on cranes of under 20 tons received most on the Pacific Coast ($1.162), joiners in the Great Lakes region ($1.126), loftsmen on the Gulf Coast ($1.110), and crane operators on cranes of 20 tons and over on the Atlantic Coast ($1.081). When only yards not covered by agreements are considered, painters, loftsmen, sheet-metal workers, and coppersmiths received top pay in the various regions.

*Helpers.*—Diversity of rates is as apparent in the case of helpers as for any other class of worker. Table 6 shows that there was as little uniformity between the regions in the rates paid helpers as there was for "other classes" of mechanics.

In yards on the Pacific Coast, however, helpers in 7 occupations averaged exactly $0.95 an hour in covered yards, while in 22 they received between $0.95 and $0.97 an hour. Only anglesmiths' helpers received over $1 an hour. In yards outside the Stabilization Agreements, erectors' helpers were the only helpers to receive exactly $0.95, while electricians', pipefitters', and shipfitters' helpers averaged over $1 an hour.

On the Atlantic Coast, furnacemen's helpers in covered yards averaged $0.929, while regulators' helpers were at the bottom of the scale with $0.707 an hour. The maximum for the other yards in this region was paid to general helpers ($0.801) and the minimum to painters' helpers ($0.737).

Covered yards on the Gulf Coast showed a difference of $0.208 between the extremes of the range. Crane-operators' helpers, 20 tons and over, received $0.898, and plate-shop machinists' helpers were paid $0.690 an hour. The difference in not-covered yards was slightly under $0.10 an hour, with electricians' helpers at $0.755 receiving the maximum and general helpers averaging the minimum of $0.656.

Furnacemen's helpers in Great Lakes covered yards receiving $0.992 topped the list in that region, whereas bolters' helpers at $0.765 were the lowest-paid workers. The $1 an hour averaged by sheet-metal helpers in not-covered Great Lakes yards is higher than the rate paid helpers in any other occupation; at the other extreme, drillers' helpers in the uncovered yards of the same region received $0.750.

In Inland yards electricians' and erectors' helpers, at $0.898 and $0.697, respectively, were the occupations receiving the highest and lowest rates.

*Other occupational groups.*—Rates paid to laborers by commercial shipyards, like "other classes" of mechanics and helpers in June 1943, had not been affected by any of the zone agreements. On the Pacific Coast, however, a rate of $0.88 an hour for laborers was provided for in the master contract. Consequently, the average rate for laborers in covered yards on the Pacific Coast as of June 18, 1943, was $0.887; the other yards paid $0.023 more. Base rates in the other regions, however, varied as much for laborers as for other occupations. Gulf

Coast yards paid the lowest rates, averaging $0.630, followed by the Atlantic Coast and Great Lakes with $0.754 and $0.780, respectively. Rates in yards outside the Stabilization Agreements followed the same pattern—Gulf Coast $0.616, Atlantic Coast $0.692, and Great Lakes $0.790. Inland yards paid laborers $0.787 an hour.

Rates paid to leadermen, foremen, and supervisors followed the progression expected of supervisors with varying degrees of responsibility, ranging from $1.336 for leadermen to $1.610 for supervisors in covered yards. Yards not covered by the Stabilization Agreements reported a range of $1.271 to $1.503 for the same occupations.

Learners, a classification which under present conditions may lead eventually to a mechanic's position, received average base rates in most regions slightly above those paid to apprentices. Apprentices are in training eventually to achieve mechanic's status. The training schedule, however, is more formalized and thorough and is designed to enable the participant to perform all of the duties required by his occupation. Since the apprenticeship training period is lengthy, progressive stages of advancement and corresponding rates of pay have been worked out. In consequence, the average rate is lower than that paid to learners—$0.815 as compared to $0.864 in covered yards and $0.863 as compared to $0.878 in not-covered yards.

Among the 10 leading occupations the regional comparisons of average basic rates are of special interest. (See p. 400.) Three of the four regions, Atlantic, Gulf, and Pacific, list one occupation, carpenters, as receiving the highest base rate. Two of the regions, Atlantic and the Great Lakes, list shipfitters at the bottom of the scale, while Gulf and Pacific Coast yards place welders in this position.

The differences in the average base rates among these 10 occupations is not so great as might be expected from previous statements concerning all occupations. For yards covered by Stabilization Agreements there was a difference of only 6.3 cents for all covered yards. The Atlantic Coast, followed closely by the Pacific Coast, Great Lakes, and Gulf Coast, showed differences of only 4.1 cents, 4.3 cents, 6.0 cents, and 8.6 cents, respectively, between the highest and lowest rates.

Among yards outside the Stabilization Agreements there was a greater range in all 5 regions between the highest- and lowest-paid of the 10 leading occupations. Two regions, Gulf Coast and Inland, recorded carpenters at the highest rate, while burners on the Atlantic Coast, electricians on the Pacific Coast, and sheet-metal workers in the Great Lakes region were listed as the highest paid. There was a slightly higher degree of uniformity in these uncovered yards in regard to the lowest-paid employees. Painters in yards on the Atlantic and Gulf Coasts, welders in the Great Lakes and Inland regions, and Pacific Coast shipfitters were in this category. Among the uncovered yards, those on the Great Lakes recorded the widest range ($0.202) between the highest rate paid any of the 10 occupations—in this case sheet-metal workers—and the lowest—welders; the Gulf Coast followed closely with a $0.192 difference between carpenters and painters. The range of $0.131 on the Atlantic Coast, of $0.083 in the Inland region, and of $0.068 on the Pacific Coast are considerably greater than those reported by covered yards in these regions.

### *Recent Decisions Affecting Occupational-Wage Structure*

Many changes in occupational wage structure have occurred since the June 1943 wage-rate schedules were collected. These changes have come in three ways: As a result of decisions on an individual-case basis by the Shipbuilding Commission of the War Labor Board; through changes negotiated by the Shipbuilding Stabilization Committee through zone agreements, approved by the War Labor Board; and through correction of intraplant inequalities by the Shipbuilding Commission pursuant to War Labor Board directives.

Of the numerous cases decided by the Shipbuilding Commission, both before and after June 1943, one is particularly outstanding because it defined first-class journeymen to include certain occupations.

In the early part of 1943, the Industrial Union of Marine and Shipbuilding Workers (C. I. O.) requested the Shipbuilding Commission, then composed of representatives of labor, management, the procurement agencies, and the War Production Board, to approve payment of the journeymen's rate of $1.20 to approximately 15,000 first-class workers in 8 Atlantic Coast Bethlehem Steel Co. yards engaged in the following 10 occupations: Burners, chippers and caulkers, compressor men, crane operators, drillers, erectors, wood caulkers, painters, riggers, and riveters.

On April 29, 1943, the Commission issued a directive order denying the union's request by a vote of 4 to 3.

The majority looked to the contract and interpreted it as meaning that questions on conformity of rates to zone standards were to be submitted not to the Commission but to the Stabilization Committee. They ruled in fact that it was not the duty of the Commission to negotiate rates, but that such matters were to be decided by collective bargaining. Furthermore, it was the majority view, that if the case were decided in favor of the union, the Commission would "(1) * * * have amended the Atlantic Coast Zone Standards by defining the term 'standard first-class mechanic,' or (2) the Commission would be declaring that Bethlehem is in violation of the Atlantic Coast Zone Standards." In essence, the majority members did not feel that they had the legal power to rewrite a contract.

The minority contended that the decision was rendered upon a technicality rather than the merits of the case. They pointed out, on the basis of supplementary data, that in most yards men in the occupations in question were paid first-class rates and that the majority opinion did not promote stabilization in the industry. The dissent also made the point that the matter had been in dispute between the parties for many months before being certified to the Commission.

On appeal by the union, Chairman Davis vacated the Commission's order and remanded the case, stating that the only thing to be decided was the dispute between Bethlehem and its employees and the decision was to be based on the facts and circumstances of the case. The Shipbuilding Commission, in making this decision, was to act as arbiter for the War Labor Board in place of the Stabilization Committee.

Once again the majority decided that the ratings of the occupations in question could not be raised under the terms of the Atlantic Coast Zone Agreement. On July 14, 1943, the War Labor Board again set

aside the Commission's directive and ordered that first-class men in these occupations be paid $1.20 an hour. The rates thus ordered, and the rates negotiated for other than first-class mechanics, did not appear on the June 18 schedules submitted by these yards.

By August 9, 1943, a new triparte commission composed of representatives of labor, management, and the public was appointed by the War Labor Board. On November 3, 1943, the National Board issued an order approving increased rates for some 30 occupations and classes on the Pacific Coast. The new rates, as established, ranged from $1.35 for blacksmiths (heavy fire) to $0.88 for laborers (sweepers and cleaners). It was estimated that these changes brought about through the efforts of the Stabilization Committee, though affecting some 60,000 workers, would increase the average base rate on the West Coast by less than 1 cent an hour. On the basis of an agreement by all parties that interchangeability of men in the following occupations would be allowed without restriction, increases in rates to $1.20 an hour were approved for drillers and reamers, punch and shear operators, holders-on, rivet heaters, riggers and plate hangers, and slingers and hook tenders.

Meanwhile, on July 7, 1943, the War Labor Board, at the request of the Shipbuilding Stabilization Committee, conducted a wage hearing for the entire industry. The outcome was a request by the union for general wage increases and a request that wage-rate structures and job classifications in the industry be reviewed and revised. The former was denied on the grounds that the workers in the industry are among the highest paid in the country, that they had already received more than the cost-of-living increase allowed under the "Little Steel" formula and that the existing wage levels precluded any claim that increases were necessary to correct substandards of living. The Board did, however, order a review of wage-rate structures.

In pursuance of the July 7 order of the War Labor Board, the Shipbuilding Commission requested the U. S. Bureau of Labor Statistics to submit detailed tabulations of wage rates for all occupations in the shipbuilding industry. From these data the Commission has evolved tentative patterns for some 26 of the major occupations on the Atlantic Coast,[16] in addition to handymen, helpers, and laborers, as shown in table 7.

The Commission also established patterns for semiskilled and premium occupations which are to be applied on a case-to-case basis.

The rates were based on those prevailing in the Atlantic region. As the Commission was also interested in determining the total cost of these rates and their effect upon stabilization, it requested the Navy Department and the Bureau of Labor Statistics to make independent estimates. A comparison of these estimates and those made by the Commission is given in table 8.

[16] Anglesmith (other than heavy fire), blacksmith, boatbuilder, boilermaker, burner, carpenter, caulker (wood), chipper, chipper and caulker, electrician, joiner, machinist (inside and outside), maintenance man, millwright, painter, pipefitter, rigger, riveter, sheet-metal worker, shipfitter, tinsmith, welder. In addition, caulker (metal), except in Norfolk, Va.; driller, except south of Baltimore; and molder, except in the New York area where it is a premium-paid craft.

TABLE 7.—*Rates Established by Shipbuilding Commission for Certain Major Occupations on the Atlantic Coast*

| Class or grade | Rates requested by the IUMSWA (C. I. O.) | Rates approved by Commission | | | | |
|---|---|---|---|---|---|---|
| | | New England | New York | Philadelphia | Baltimore | South of Baltimore |
| Standard mechanic: | | | | | | |
| First class | $1.20 | $1.20 | $1.20 | $1.20 | $1.20 | $1.20 |
| Second class | 1.14 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 |
| Third class | 1.08 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Handyman: [1] | | | | | | |
| First class | | .98 | .98 | .98 | .98 | .98 |
| Second class | | .92 | .92 | .92 | .92 | .92 |
| Third class | | | | | | .86 |
| Helper: | | | | | | |
| First class | | .88 | .88 | .88 | .84 | .80 |
| Second class | | .84 | .84 | .84 | .805 | .74 |
| Third class | [2] .90 | | | | | .68 |
| Laborer | .90 | .805 | .805 | .805 | .805 | .64 |

[1] Union requested that this classification be eliminated, with all handymen doing third-class mechanics' work, and requested a new classification with $0.98 minimum for certain semiskilled trades where employees were not upgraded to skilled classifications.
[2] Minimum.

TABLE 8.—*Estimates of Cost of New Rates Established by Shipbuilding Commission*

| Item | Shipbuilding Commission | Navy Department | | Bureau of Labor Statistics |
|---|---|---|---|---|
| | | Conservative estimate | Liberal estimate | |
| Annual cost [1] | | $14,763,258.64 | $19,854,440.32 | $15,250,000 |
| Percent of workers affected | 38 | 32 | 37 | 29 |
| Average wage increase to affected workers | $0.038 | $0.044 | $0.051 | $0.041 |
| Average wage increase to all production workers | $0.015 | $0.014 | $0.019 | $0.012 |
| Percent of increase in wage bill | 1.43 | 1.2 | 1.6 | 1.0 |

[1] Representatives of industry estimated the total additional cost to be between $30,000,000 and $50,000,000 annually.

Though the Commission has now established definite patterns for covered yards on the Atlantic Coast, these yards are not required or privileged to establish the new rates without the approval of the Commission. Thus the Commission maintains strict control of rates and may, where it deems it advisable because of local peculiarities, retain the structure in individual yards that conforms to established practices which may not be in line with the patterns.

Similar action for the remaining regions is expected to result from studies now being made by the Commission. In an effort further to stabilize the shipbuilding industry, on June 12, 1944, the Commission established 3 percent as the maximum ratio permitted between premium men and total production force in individual shipyards.

# Trend of Factory Earnings, 1939 to May 1944

THE published average earnings of factory workers are summarized in the accompanying table for selected months from January 1939 to May 1944.[1] The earnings shown in this table are on a gross basis (i.e., before deductions for social security, income and victory taxes, bond purchases, etc.).

Weekly earnings in all manufacturing averaged $46.13 in May 1944—98.9 percent above the average in January 1939, 73.2 percent above January 1941, and 18.6 percent above October 1942. Such factors as longer hours of work, merit increases for individual workers, premium pay for overtime worked, changing composition of the labor force within plants, shifts in the distribution of workers among plants and among industries, as well as wage-rate increases, account for the rise in earnings.

Gross hourly earnings in all manufacturing averaged 101.7 cents in May 1944—60.9 percent above the average in January 1939, 48.9 percent above January 1941, and 13.9 percent above October 1942.

Straight-time average hourly earnings, as shown in columns 7 to 9, are estimated to exclude premium pay at time and a half for work in excess of 40 hours. The effect of extra pay for work on supplementary shifts and on holidays is included. For all manufacturing, the straight-time average in May 1944 was 94.4 cents per hour; this was 51.5 percent higher than in January 1939, 42.2 percent above January 1941, and 12.5 percent above October 1942.

*Earnings of Factory Workers in Selected Months, 1939 to May 1944*

| Month and year | Average weekly earnings | | | Average hourly earnings | | | Estimated straight-time average hourly earnings [1] | | | Estimated straight-time average hourly earnings weighted by January 1939 employment [2] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All manufacturing | Durable goods | Nondurable goods | All manufacturing | Durable goods | Nondurable goods | All manufacturing | Durable goods | Nondurable goods | All manufacturing | Durable goods | Nondurable goods |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| 1939: Jan. | $23.19 | $25.33 | $21.57 | $0.632 | $0.696 | $0.583 | $0.623 | $0.688 | $0.574 | $0.623 | $0.688 | $0.574 |
| 1940: Jan. | 24.56 | 27.39 | 22.01 | .655 | .717 | .598 | .644 | .703 | .589 | .635 | .697 | .589 |
| 1941: Jan. | 26.64 | 30.48 | 22.75 | .683 | .749 | .610 | .664 | .722 | .601 | .648 | .711 | .600 |
| 1942: Jan. | 33.40 | 38.98 | 26.97 | .801 | .890 | .688 | .762 | .835 | .670 | .729 | .810 | .667 |
| July | 36.43 | 42.51 | 28.94 | .856 | .949 | .725 | .809 | .885 | .701 | .759 | .846 | .694 |
| Oct. | 38.89 | 45.31 | 30.66 | .893 | .990 | .751 | .839 | .919 | .723 | .782 | .869 | .716 |
| 1943: Jan. | 40.62 | 46.68 | 32.10 | .919 | 1.017 | .768 | .859 | .941 | .733 | .794 | .886 | .724 |
| Apr. | 42.48 | 48.67 | 33.58 | .944 | 1.040 | .790 | .878 | .957 | .751 | .808 | .897 | .741 |
| July | 42.76 | 48.76 | 34.01 | .963 | 1.060 | .806 | .899 | .981 | .766 | .823 | .919 | .759 |
| Oct. | 44.86 | 51.26 | 35.18 | .988 | 1.086 | .824 | .916 | .997 | .781 | .836 | .929 | .765 |
| Dec. | 44.58 | 50.50 | 35.61 | .995 | 1.093 | .832 | .927 | 1.011 | .788 | .846 | .942 | .773 |
| 1944: Jan. | 45.29 | 51.21 | 36.03 | 1.002 | 1.099 | .838 | .931 | 1.013 | .793 | .850 | .945 | .778 |
| Mar. | 45.64 | 51.54 | 36.56 | 1.006 | 1.103 | .846 | .934 | 1.015 | .799 | .855 | .947 | .783 |
| Apr.[3] | 45.56 | 51.68 | 36.17 | 1.013 | 1.110 | .850 | .942 | 1.022 | .806 | .862 | .954 | .792 |
| May [3] | 46.13 | 52.05 | 37.04 | 1.017 | 1.113 | .858 | .944 | 1.025 | .810 | .865 | .956 | .796 |

[1] Average hourly earnings, excluding the effect of premium pay for overtime.
[2] Average hourly earnings, excluding premium pay for overtime, weighted by man-hours of employment in the major divisions of the manufacturing industry for January 1939.
[3] Preliminary.

[1] Compare Trends in Factory Wages, 1939–43, Monthly Labor Review, November 1943 (pp. 869–880, especially table 4 (p. 879). For detailed data regarding weekly earnings, see Detailed Reports for Industrial and Business Employment, May 1944, table 6 (p. 447), of this issue.

The shift of workers from relatively low-wage to relatively high-wage industries since 1939 would have raised the average earnings of factory workers, even if no other influences had been present. The effects of such interindustry shifts have been eliminated from the averages shown in columns 10 to 12 of the table. If employment had been distributed between industries as it was in January 1939, the straight-time hourly earnings of factory workers would have averaged 86.5 cents in May 1944, or 38.8 percent above the corresponding average in January 1939, 33.5 percent above January 1941, and 10.6 percent above October 1942. Between April 1944 and May 1944 the rise in straight-time hourly earnings, after eliminating the influence of shifting employment, amounted to three-tenths of 1 percent. Even this latter series of averages exaggerates the rise in wage rates, because it includes the influence of interplant shifts of employment, merit increases for individual workers, and premium rates for work on extra shifts and on holidays.

## Hourly Wage Rates in Germany in 1943

GERMANY'S wage policy during 1943, as reflected in a report on wage rates for 1943, published in Wirtschaft und Statistik (Berlin) for April 1944, indicates a tendency to permit adjustments in wage rates if such changes tend to aid the war effort. The general policy, of restricting money wage rates while permitting increases in actual earnings through the lengthening of working hours and incentive payments, was modified to the extent that increases in hourly wage rates were granted in certain industries. This step may have been in part an attempt to overcome the gradual decrease in output of workers who have been working excessively long hours over a long period of time.

In several of the 15 industries regularly covered by the official German wage statistics, increases in hourly wage rates were granted during 1943. In most cases, these increases were due to reclassifications of localities with regard to the cost of living (locality classes form one of the bases for differentiation in wage rates). Only comparatively small groups of workers were therefore affected by the increases, and average wage-rate increases thus remained very small. In the construction industry, the increase in hourly wage rates of masons and unskilled workers averaged only 0.1 pfennig for the entire country. Slight increases in hourly wage rates are reported for the chemical industry (region of Hesse) and the clothing industry. The largest reported increase over 1942 wage rates (4.8 pfennigs per hour) was that for skilled workers in the woodworking industry of East Prussia.

In the following table, average hourly wage rates of skilled male workers and male and female helpers are given for December 1943. For comparison the corresponding wage rates for December 1941 (from Reichsarbeitsblatt, March 15, 1942) are also listed. The wage rates in the table, expressed in pfennigs (100 pfennigs=1 reichsmark), represent gross money wages before deductions for taxes, social insurance, and other payments. The exchange value of the reichsmark, normally quoted as 40 cents in United States currency, cannot be determined, and little or no reliable information regarding its purchasing value is available at this time.

*Average Hourly Wage Rates in Germany in December 1941 and December 1943*

| Industry | Average hourly wage rates (in pfennigs) | | | | | |
|---|---|---|---|---|---|---|
| | December 1941 | | | December 1943 | | |
| | Skilled male workers | Male helpers | Female helpers | Skilled male workers | Male helpers | Female helpers |
| All industries | 80.8 | 63.9 | 44.5 | 81.0 | 64.1 | 44.7 |
| Hard-coal mining | 95.5 | 60.5 | ..... | 105.1 | 60.5 | ..... |
| Lignite mining | 75.8 | 67.4 | ..... | 75.8 | 67.4 | ..... |
| Metalworking | 79.4 | 62.4 | 46.9 | 79.4 | 62.4 | 46.9 |
| Chemicals | 88.0 | ..... | 47.5 | 87.8 | ..... | 47.9 |
| Construction | 84.4 | 67.7 | ..... | 84.9 | 68.1 | ..... |
| Paper manufacture | 75.9 | 57.3 | 38.6 | 76.6 | 58.2 | 39.3 |
| Paper products | 92.9 | 60.0 | 43.0 | 92.2 | 60.0 | 43.0 |
| Printing trades | 96.1 | 79.7 | 48.8 | 96.2 | 79.7 | 48.9 |
| Woodworking | 79.6 | 61.2 | ..... | 79.9 | 61.3 | ..... |
| Ceramics | 70.8 | 58.9 | 36.1 | 70.8 | 58.9 | 36.1 |
| Textiles | 65.6 | 54.9 | 40.8 | 66.1 | 55.3 | 41.1 |
| Clothing | 74.1 | ..... | ..... | 74.3 | ..... | ..... |
| Shoes | 79.2 | ..... | ..... | 79.2 | ..... | ..... |
| Brewing | 105.1 | 92.9 | 59.8 | 105.2 | 92.3 | 60.6 |
| Confectionery | 80.8 | 69.1 | 46.4 | 80.8 | 69.1 | 46.4 |
| Railways | 85.4 | 72.8 | ..... | 85.4 | 72.8 | ..... |
| Postal service | 80.4 | 67.0 | ..... | 80.4 | 67.0 | ..... |
| Durable (capital) goods | 84.4 | 64.5 | ..... | 86.0 | 64.7 | ..... |
| Nondurable (consumption) goods | 73.9 | 61.8 | ..... | 74.2 | 62.0 | ..... |

# *Cost of Living and Retail Prices*

## Cost of Living in Large Cities, June 1944

RETAIL prices of the goods and services important in the budget of city families advanced 0.2 percent between mid-May and mid-June. Prices of all principal groups in the budget except rent, and fuel, electricity, and ice were slightly higher than in May 1944.

During the month retail food prices increased only 0.1 percent, or considerably less than the usual seasonal rise. At this level, they were 4.4 percent below average prices in June 1943 before the prices of meats were rolled back. In the 12-month period ending June 1943, in contrast, food prices had increased 15.2 percent.

The increase in cost of food from May to June 1944 was due chiefly to seasonal increases in prices of eggs and some fresh fruits and vegetables, particularly white potatoes, sweetpotatoes, oranges, and apples. Potato prices advanced over 13 percent (more than double the usual seasonal advance) principally as a result of the disappearance of last year's late potatoes and increased sales of the higher-priced new potatoes. Onions and green beans dropped 28 and 15 percent, respectively.

During the past year, prices charged to moderate-income city families for living essentials have shown comparatively little change, on the average. In June 1944, the Bureau of Labor Statistics cost-of-living index was 0.5 percent higher than in June 1943, and 27.2 percent above the level of August 1939, the month preceding the outbreak of war in Europe.

In connection with the figures given in the following tables it should be borne in mind that the Bureau of Labor Statistics index indicates average changes in retail prices of selected goods, rents, and services bought by families of wage earners and lower-salaried workers in large cities. The items covered represented 70 percent of the expenditures of families who had incomes ranging from $1,250 to $2,000 in 1934–36.

The index does not show the full wartime effect on the cost of living of such factors as lowered quality, disappearance of low-priced goods, and forced changes in housing and eating away from home.

It does not measures changes in *total* "living costs"— that is, *in the total amount families spend for living.* Income taxes and bond subscriptions are not included.

TABLE 1.—*Percent of Change*[1] *in Cost of Living in Large Cities Between May 15 and June 15, 1944, by Groups*

[Some indexes for May revised]

| City | All items | Food | Clothing | Rent | Fuel, electricity, and ice | House-furnishings | Miscellaneous |
|---|---|---|---|---|---|---|---|
| Average: Large cities | +0.2 | [2] +0.1 | +0.4 | 0 | −0.2 | +2.5 | +0.3 |
| New England: Boston | +.4 | +.6 | +.2 | 0 | −.2 | +5.0 | +.2 |
| Middle Atlantic: | | | | | | | |
| Buffalo | +.2 | +.3 | +.2 | −0.1 | −.4 | +2.6 | +.2 |
| New York | 0 | −.1 | +.4 | −.1 | −.3 | +.5 | 0 |
| Philadelphia | +.9 | +1.3 | +.9 | −.1 | 0 | +3.0 | +.5 |
| Pittsburgh | +.8 | +.9 | +2.0 | 0 | +.8 | +2.3 | +.4 |
| East North Central: | | | | | | | |
| Chicago | +.5 | +.9 | +.4 | 0 | 0 | +2.2 | +.3 |
| Cincinnati | +1.6 | +3.5 | +.1 | −.1 | 0 | +1.9 | +.2 |
| Cleveland | 0 | −.4 | +.3 | +.1 | +.1 | +1.0 | +.3 |
| Detroit | +.6 | +.5 | +.1 | +.1 | +.4 | +3.4 | +1.7 |
| West North Central: | | | | | | | |
| Kansas City | −.1 | −.7 | +.4 | +.2 | 0 | +.5 | +.4 |
| Minneapolis | 0 | −.4 | +.2 | 0 | 0 | +.2 | +.3 |
| St. Louis | +.3 | +.7 | +.1 | 0 | 0 | +1.2 | 0 |
| South Atlantic: | | | | | | | |
| Baltimore | +.5 | +.5 | +.6 | 0 | −.5 | +3.6 | +.2 |
| Savannah | +.4 | +.5 | +.5 | 0 | 0 | +1.1 | +.1 |
| Washington, D. C | +.4 | +.9 | +.2 | 0 | −.5 | +.6 | +.6 |
| East South Central: Birmingham | +.6 | +.9 | +.8 | 0 | +1.1 | +.1 | +.6 |
| West South Central: Houston | −.2 | −.7 | +.1 | −.1 | −.1 | +2.2 | +.2 |
| Mountain: Denver | −.3 | −1.3 | +.8 | 0 | 0 | +4.8 | 0 |
| Pacific: | | | | | | | |
| Los Angeles | −.6 | −2.0 | +.1 | +.1 | 0 | +1.8 | +.3 |
| San Francisco | −.2 | −1.5 | +.7 | +.1 | 0 | +13.6 | +.1 |
| Seattle | −.1 | −.6 | +.7 | +.1 | +.4 | +1.5 | +.2 |

[1] Based on indexes of cost of goods purchased by wage earners and lower-salaried workers.
[2] Based on prices for 56 cities collected on Tuesday nearest the 15th of the month.

TABLE 2.—*Indexes of Cost of Living in Large Cities, April 15, May 15, and June 15, 1944*

[Some indexes for April and May revised]

| City and date | Indexes [1] (1935–39=100) of cost of— | | | | | | |
|---|---|---|---|---|---|---|---|
| | All items | Food | Clothing | Rent | Fuel electricity, and ice | House-furnishings | Miscellaneous |
| **Average: Large cities:** | | | | | | | |
| April 15 | 124.6 | [2] 134.6 | 137.1 | 108.1 | 109.9 | 132.9 | 120.9 |
| May 15 | 125.1 | [2] 135.5 | 137.4 | 108.1 | 109.8 | 135.0 | 121.3 |
| June 15 | 125.4 | [2] 135.7 | 138.0 | 108.1 | 109.6 | 138.4 | 121.7 |
| **New England:** | | | | | | | |
| Boston: | | | | | | | |
| April 15 | 121.2 | 129.5 | 135.4 | 104.9 | 120.2 | 125.1 | 116.0 |
| May 15 | 121.3 | 129.6 | 135.6 | 104.9 | 120.2 | 126.5 | 116.2 |
| June 15 | 121.8 | 130.4 | 135.9 | 104.9 | 120.0 | 132.8 | 116.4 |
| Manchester: | | | | | | | |
| April 15 | (3) | 130.8 | (3) | (3) | 124.7 | (3) | (3) |
| May 15 | (3) | 131.7 | (3) | (3) | 124.7 | (3) | (3) |
| June 15 | 126.2 | 130.9 | 141.7 | 107.9 | 125.7 | 136.6 | 119.0 |
| Portland: | | | | | | | |
| April 15 | (3) | 131.2 | (3) | (3) | 119.3 | (3) | (3) |
| May 15 | (3) | 131.4 | (3) | (3) | 119.3 | (3) | (3) |
| June 15 | 124.1 | 131.1 | 138.9 | 106.6 | 119.2 | 139.0 | 120.8 |
| **Middle Atlantic:** | | | | | | | |
| Buffalo: | | | | | | | |
| April 15 | 124.9 | 132.5 | 135.0 | 114.7 | 107.3 | 128.5 | 124.5 |
| May 15 | 126.0 | 134.2 | 135.2 | 114.7 | 107.3 | 138.1 | 124.9 |
| June 15 | 126.3 | 134.6 | 135.5 | 114.6 | 106.9 | 141.7 | 125.1 |
| New York: | | | | | | | |
| April 15 | 125.3 | 135.7 | 141.5 | 103.5 | 114.2 | 126.6 | 123.8 |
| May 15 | 125.9 | 137.0 | 141.9 | 103.5 | 113.9 | 126.7 | 123.9 |
| June 15 | 125.9 | 136.8 | 142.4 | 103.4 | 113.6 | 127.3 | 123.9 |
| Philadelphia: | | | | | | | |
| April 15 | 123.5 | 132.5 | 136.2 | 106.8 | 110.4 | 132.3 | 118.9 |
| May 15 | 123.7 | 132.8 | 137.3 | 106.8 | 109.0 | 133.7 | 119.1 |
| June 15 | 124.8 | 134.5 | 138.5 | 106.7 | 109.0 | 137.7 | 119.7 |
| Pittsburgh: | | | | | | | |
| April 15 | 125.4 | 134.8 | 151.7 | 107.4 | 111.5 | 130.6 | 117.9 |
| May 15 | 125.5 | 134.6 | 151.8 | 107.4 | 111.5 | 130.7 | 118.5 |
| June 15 | 126.5 | 135.8 | 154.8 | 107.4 | 112.4 | 133.7 | 119.0 |
| Scranton: | | | | | | | |
| April 15 | (3) | 135.4 | (3) | (3) | 112.2 | (3) | (3) |
| May 15 | (3) | 135.5 | (3) | (3) | 112.2 | (3) | (3) |
| June 15 | 123.2 | 135.9 | 138.3 | 97.2 | 111.0 | 139.2 | 114.7 |
| **East North Central:** | | | | | | | |
| Chicago: | | | | | | | |
| April 15 | 124.0 | 133.9 | 131.2 | 114.7 | 105.1 | 135.1 | 118.5 |
| May 15 | 124.2 | 134.2 | 131.5 | 114.7 | 105.1 | 135.7 | 119.0 |
| June 15 | 124.8 | 135.4 | 132.0 | 114.7 | 105.1 | 138.7 | 119.3 |
| Cincinnati: | | | | | | | |
| April 15 | 125.2 | 135.4 | 136.7 | 105.5 | 106.0 | 140.1 | 122.1 |
| May 15 | 124.6 | 133.7 | 136.8 | 105.5 | 106.0 | 140.3 | 122.2 |
| June 15 | 126.6 | 138.4 | 137.0 | 105.4 | 106.0 | 143.0 | 122.5 |
| Cleveland: | | | | | | | |
| April 15 | 128.8 | 141.7 | 138.8 | 115.7 | 114.8 | 135.8 | 119.3 |
| May 15 | 128.9 | 141.9 | 139.0 | 115.6 | 114.9 | 137.1 | 119.5 |
| June 15 | 128.9 | 141.3 | 139.4 | 115.7 | 115.0 | 138.5 | 119.9 |
| Detroit: | | | | | | | |
| April 15 | 125.2 | 131.2 | 135.7 | 114.6 | 112.0 | 134.4 | 125.8 |
| May 15 | 125.8 | 132.4 | 135.9 | 114.6 | 111.9 | 136.5 | 126.1 |
| June 15 | 126.6 | 133.0 | 136.1 | 114.7 | 112.4 | 141.1 | 128.2 |
| Indianapolis: | | | | | | | |
| April 15 | (3) | 132.1 | (3) | (3) | 112.0 | (3) | (3) |
| May 15 | (3) | 132.2 | (3) | (3) | 112.1 | (3) | (3) |
| June 15 | 126.2 | 132.6 | 134.1 | 115.6 | 112.1 | 148.2 | 122.3 |
| Milwaukee: | | | | | | | |
| April 15 | (3) | 132.1 | (3) | (3) | 109.6 | (3) | (3) |
| May 15 | (3) | 134.4 | (3) | (3) | 109.8 | (3) | (3) |
| June 15 | 123.8 | 135.5 | 130.3 | 108.3 | 109.6 | 142.7 | 117.9 |
| **West North Central:** | | | | | | | |
| Kansas City: | | | | | | | |
| April 15 | 122.9 | 130.1 | 133.6 | 109.2 | 110.2 | 124.5 | 124.1 |
| May 15 | 123.6 | 131.4 | 134.2 | 109.3 | 110.2 | 126.3 | 124.5 |
| June 15 | 123.5 | 130.5 | 134.8 | 109.5 | 110.2 | 126.9 | 125.0 |
| Minneapolis: | | | | | | | |
| April 15 | 121.7 | 128.9 | 135.0 | 110.3 | 104.1 | 132.2 | 120.2 |
| May 15 | 122.2 | 129.5 | 135.4 | 110.3 | 104.9 | 132.3 | 120.8 |
| June 15 | 122.2 | 129.0 | 135.7 | 110.3 | 104.9 | 132.5 | 121.2 |
| St. Louis: | | | | | | | |
| April 15 | 123.6 | 137.4 | 137.4 | 106.0 | 107.2 | 124.2 | 117.0 |
| May 15 | 123.9 | 137.8 | 137.5 | 106.0 | 107.2 | 124.2 | 117.2 |
| June 15 | 124.3 | 138.7 | 137.6 | 106.0 | 107.2 | 125.7 | 117.2 |

See footnotes at end of table.

TABLE 2.—*Indexes of Cost of Living in Large Cities, April 15, May 15, and June 15, 1944*—Continued

[Some indexes for April and May revised]

| City and date | Indexes [1] (1935–39=100) of cost of— | | | | | | |
|---|---|---|---|---|---|---|---|
| | All items | Food | Clothing | Rent | Fuel, electricity, and ice | House-furnishings | Miscellaneous |
| South Atlantic: | | | | | | | |
| Atlanta: | | | | | | | |
| April 15 | [3] | 134.6 | [3] | [3] | 114.0 | [3] | [3] |
| May 15 | [3] | 135.4 | [3] | [3] | 114.2 | [3] | [3] |
| June 15 | 125.6 | 135.2 | 134.1 | 106.7 | 114.5 | 131.3 | 123.9 |
| Baltimore: | | | | | | | |
| April 15 | 126.7 | 140.3 | 141.8 | 106.4 | 109.4 | 138.4 | 119.9 |
| May 15 | 126.9 | 140.5 | 142.8 | 106.4 | 109.4 | 139.7 | 120.2 |
| June 15 | 127.5 | 141.2 | 143.6 | 106.4 | 108.9 | 144.7 | 120.5 |
| Jacksonville: | | | | | | | |
| April 15 | [3] | 141.4 | [3] | [3] | 114.2 | [3] | [3] |
| May 15 | [3] | 143.0 | [3] | [3] | 114.2 | [3] | [3] |
| June 15 | 131.7 | 142.9 | 137.1 | 112.5 | 114.2 | 149.0 | 131.4 |
| Norfolk: | | | | | | | |
| April 15 | [3] | 143.8 | [3] | [3] | 117.4 | [3] | [3] |
| May 15 | [3] | 142.7 | [3] | [3] | 117.8 | [3] | [3] |
| June 15 | 130.3 | 142.0 | 139.5 | 108.6 | 117.8 | 140.8 | 128.4 |
| Richmond: | | | | | | | |
| April 15 | [3] | 131.6 | [3] | [3] | 107.9 | [3] | [3] |
| May 15 | [3] | 131.9 | [3] | [3] | 107.9 | [3] | [3] |
| June 15 | 122.6 | 134.0 | 139.6 | 103.9 | 107.4 | 134.7 | 116.0 |
| Savannah: | | | | | | | |
| April 15 | 133.4 | 150.8 | 139.6 | 115.1 | 111.8 | 126.1 | 127.9 |
| May 15 | 133.2 | 149.4 | 139.1 | 115.2 | 111.8 | 136.4 | 128.4 |
| June 15 | 133.7 | 150.2 | 139.8 | 115.2 | 111.8 | 137.9 | 128.5 |
| Washington, D. C.: | | | | | | | |
| April 15 | 123.3 | 132.8 | 146.1 | 100.3 | 109.4 | 133.8 | 124.4 |
| May 15 | 123.9 | 134.1 | 146.3 | 100.3 | 109.4 | 133.8 | 125.1 |
| June 15 | 124.4 | 135.3 | 146.6 | 100.3 | 108.8 | 134.6 | 125.8 |
| East South Central: | | | | | | | |
| Birmingham: | | | | | | | |
| April 15 | 127.6 | 136.1 | 136.8 | 122.5 | 104.6 | 133.6 | 122.8 |
| May 15 | 128.7 | 138.5 | 137.3 | 122.5 | 104.6 | 134.7 | 123.5 |
| June 15 | 129.5 | 139.8 | 138.4 | 122.5 | 105.8 | 134.9 | 124.2 |
| Memphis: | | | | | | | |
| April 15 | [3] | 141.3 | [3] | [3] | 105.2 | [3] | [3] |
| May 15 | [3] | 143.0 | [3] | [3] | 105.2 | [3] | [3] |
| June 15 | 129.2 | 144.7 | 145.1 | 116.0 | 105.2 | 138.1 | 118.0 |
| Mobile: | | | | | | | |
| April 15 | [3] | 143.4 | [3] | [3] | 104.4 | [3] | [3] |
| May 15 | [3] | 143.4 | [3] | [3] | 104.4 | [3] | [3] |
| June 15 | 127.2 | 142.1 | 133.6 | 114.5 | 104.4 | 142.7 | 119.4 |
| West South Central: | | | | | | | |
| Houston: | | | | | | | |
| April 15 | 123.2 | 135.3 | 135.5 | 109.4 | 91.2 | 124.1 | 121.1 |
| May 15 | 123.8 | 135.9 | 135.6 | 109.4 | 91.2 | 124.4 | 122.5 |
| June 15 | 123.6 | 135.0 | 135.7 | 109.3 | 91.1 | 127.1 | 122.8 |
| New Orleans: | | | | | | | |
| April 15 | [3] | 148.5 | [3] | [3] | 104.6 | [3] | [3] |
| May 15 | [3] | 148.4 | [3] | [3] | 104.6 | [3] | [3] |
| June 15 | 129.4 | 146.9 | 137.3 | 107.1 | 104.4 | 134.1 | 117.9 |
| Mountain: | | | | | | | |
| Denver: | | | | | | | |
| April 15 | 123.9 | 136.6 | 128.5 | 109.2 | 103.6 | 136.4 | 119.5 |
| May 15 | 125.1 | 139.3 | 128.6 | 109.3 | 104.1 | 136.7 | 120.1 |
| June 15 | 124.7 | 137.5 | 129.6 | 109.3 | 104.1 | 143.2 | 120.1 |
| Pacific: | | | | | | | |
| Los Angeles: | | | | | | | |
| April 15 | 126.0 | 138.6 | 137.3 | 110.4 | 92.5 | 120.2 | 124.3 |
| May 15 | 127.6 | 142.0 | 137.2 | 110.4 | 92.5 | 129.9 | 124.6 |
| June 15 | 126.8 | 139.2 | 137.3 | 110.5 | 92.5 | 132.3 | 125.0 |
| Portland, Oreg.: | | | | | | | |
| April 15 | [3] | 142.2 | [3] | [3] | 116.7 | [3] | [3] |
| May 15 | [3] | 144.7 | [3] | [3] | 116.7 | [3] | [3] |
| June 15 | 129.4 | 144.4 | 140.2 | 115.5 | 92.1 | 136.9 | 124.4 |
| San Francisco: | | | | | | | |
| April 15 | 128.3 | 142.2 | 135.1 | 106.2 | 92.6 | 120.9 | 128.8 |
| May 15 | 129.4 | 144.7 | 135.5 | 106.2 | 92.6 | 120.9 | 129.1 |
| June 15 | 129.2 | 142.5 | 136.5 | 106.3 | 92.6 | 137.4 | 129.2 |
| Seattle: | | | | | | | |
| April 15 | 127.9 | 139.2 | 136.4 | 111.4 | 101.4 | 127.3 | 128.8 |
| May 15 | 128.9 | 141.3 | 136.9 | 111.4 | 101.7 | 127.3 | 130.2 |
| June 15 | 128.8 | 140.4 | 137.8 | 111.5 | 102.1 | 129.2 | 130.4 |

[1] Based on changes in cost of goods purchased by wage earners and lower-salaried workers.
[2] Based on prices for 56 cities collected on the Tuesday nearest the 15th of the month.
[3] Monthly data not available.

# Retail Prices of Food in June 1944

PERCENTAGE changes in retail food costs on June 15, 1944, as compared with costs in the previous month and in June 1943, are shown in table 1.

TABLE 1.—*Percent of Change in Retail Costs of Food in 56 Large Cities Combined,* [1] *in Specified Periods, by Commodity Groups*

| Commodity group | May 16, 1944, to June 13, 1944 | June 15, 1943, to June 13, 1944 | Sept. 15, 1942, to June 13, 1944 | Jan. 14, 1941, to June 13, 1944 | Aug. 15, 1939, to June 13, 1944 |
|---|---|---|---|---|---|
| All foods | +0.1 | −4.4 | +7.2 | +38.8 | +45.1 |
| Cereals and bakery products | +.3 | +.8 | +2.8 | +14.2 | +16.1 |
| Meats | −.4 | −6.1 | −.6 | +28.4 | +35.6 |
| Beef and veal | −.1 | −9.6 | −5.7 | +8.6 | +19.3 |
| Pork | +.1 | −10.7 | −9.7 | +30.1 | +27.3 |
| Lamb | +.3 | −5.5 | +.8 | +36.6 | +36.4 |
| Chickens | −1.2 | +4.7 | +15.3 | +58.5 | +62.9 |
| Fish, fresh and canned | −1.9 | −2.2 | +16.9 | +65.7 | +97.5 |
| Dairy products | 0 | −.1 | +4.5 | +27.0 | +43.4 |
| Eggs | +1.6 | −11.7 | −16.8 | +32.5 | +42.3 |
| Fruits and vegetables | +.7 | −7.3 | +34.2 | +86.5 | +88.3 |
| Fresh | +.8 | −8.7 | +41.7 | +97.6 | +98.9 |
| Canned | 0 | −1.0 | +4.4 | +41.4 | +41.0 |
| Dried | +.4 | +3.5 | +14.4 | +64.8 | +81.7 |
| Beverages | −.1 | −.2 | +.4 | +36.7 | +31.0 |
| Fats and oils | −.2 | −2.7 | +2.0 | +53.3 | +45.7 |
| Sugar and sweets | 0 | 0 | −.4 | +32.7 | +32.3 |

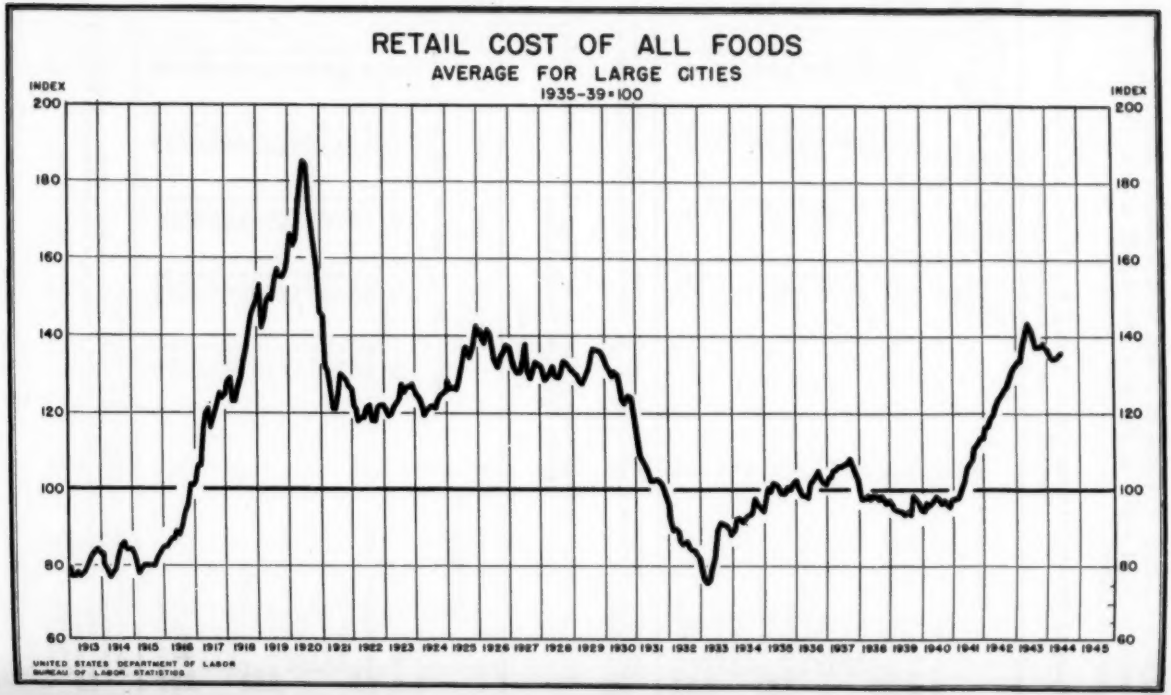
[1] The number of cities included in the index was changed from 51 to 56 in March 1943, with the necessary adjustments for maintaining comparability. At the same time the number of foods in the index was increased from 54 to 61.

TABLE 2.—*Indexes of Retail Costs of Food in 56* [1] *Large Cities Combined,* [2] *by Commodity Groups, on Specified Dates*

[1935-39=100]

| Commodity group | 1944 | | 1943 | 1942 | 1941 | 1939 |
|---|---|---|---|---|---|---|
| | June 13 [3] | May 16 | June 15 | Sept. 15 | Jan. 14 | Aug. 15 |
| All foods | 135.7 | 135.5 | 141.9 | 126.6 | 97.8 | 93.5 |
| Cereals and bakery products | 108.4 | 108.1 | 107.5 | 105.4 | 94.9 | 93.4 |
| Meats | 129.8 | 130.3 | 138.3 | 130.6 | 101.1 | 95.7 |
| Beef and veal | 118.8 | 118.9 | 131.4 | 126.0 | 109.4 | 99.6 |
| Pork | 112.0 | 111.9 | 125.4 | 124.0 | 86.1 | 88.0 |
| Lamb | 134.8 | 134.4 | 142.7 | 133.7 | 98.7 | 98.8 |
| Chickens | 154.1 | 155.9 | 147.2 | 133.7 | 97.2 | 94.6 |
| Fish, fresh and canned | 196.7 | 200.5 | 201.1 | 168.2 | 118.7 | 99.6 |
| Dairy products | 133.5 | 133.5 | 133.7 | 127.7 | 105.1 | 93.1 |
| Eggs | 129.1 | 127.1 | 146.2 | 155.2 | 97.4 | 90.7 |
| Fruits and vegetables | 174.0 | 172.8 | 187.8 | 129.7 | 93.3 | 92.4 |
| Fresh | 184.6 | 183.1 | 202.1 | 130.3 | 93.4 | 92.8 |
| Canned | 129.2 | 129.2 | 130.5 | 123.8 | 91.4 | 91.6 |
| Dried | 164.1 | 163.5 | 158.6 | 143.4 | 99.6 | 90.3 |
| Beverages | 124.3 | [4] 124.4 | 124.5 | 123.8 | 90.9 | 94.9 |
| Fats and oils | 123.1 | 123.3 | 126.5 | 120.7 | 80.3 | 84.5 |
| Sugar and sweets | 126.5 | 126.5 | 126.5 | 127.0 | 95.3 | 95.6 |

[1] Indexes based on 51 cities combined prior to March 1943.
[2] Aggregate costs of 61 foods (54 foods prior to March 1943) in each city, weighted to represent total purchases of families of wage earners and lower-salaried workers, have been combined with the use of population weights.
[3] Preliminary.
[4] Revised.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AVERAGE FOR LARGE CITIES
1935-39=100
INDEX
200
180
160
140
120
100
80
60
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UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

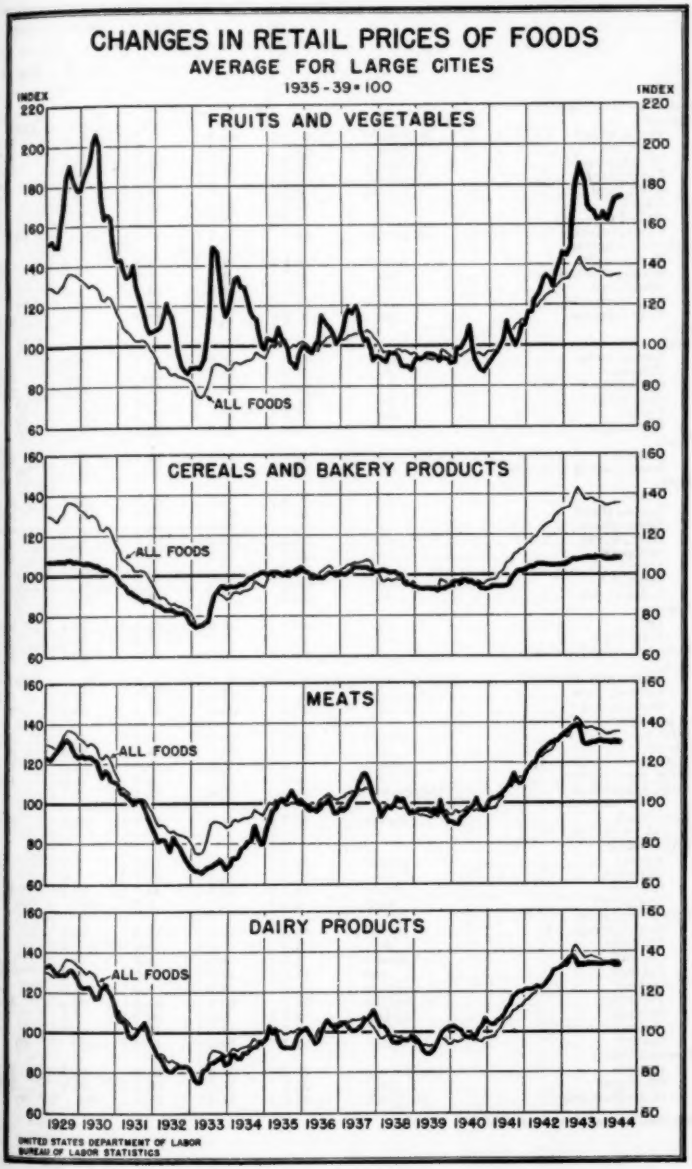

CHANGES IN RETAIL PRICES OF FOODS
AVERAGE FOR LARGE CITIES
1935-39=100
INDEX
FRUITS AND VEGETABLES
ALL FOODS
CEREALS AND BAKERY PRODUCTS
ALL FOODS
MEATS
ALL FOODS
DAIRY PRODUCTS
ALL FOODS
220
200
180
160
140
120
100
80
60
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

TABLE 3.—*Average Retail Prices of 78 Foods in 56 Large Cities Combined,*[1] *June 1944, Compared with Earlier Months*

| Article | 1944 | | 1943 | 1941 | 1939 |
|---|---|---|---|---|---|
| | June 13 [2] | May 16 | June 15 | Jan. 14 | Aug. 15 |
| **Cereals and bakery products:** | | | | | |
| Cereals: | *Cents* | *Cents* | *Cents* | *Cents* | *Cents* |
| Flour, wheat, 10 pounds | 64.9 | 65.2 | 61.1 | 41.4 | 33.8 |
| Macaroni, pound | 15.7 | 15.7 | 15.5 | 13.8 | 14.0 |
| Wheat cereal [3], 28 ounces | 23.2 | 23.3 | 23.2 | 23.5 | 24.2 |
| Corn flakes, 8 ounces | 6.5 | 6.5 | 6.7 | 7.1 | 7.0 |
| Corn meal, pound | 6.2 | 6.1 | 5.6 | 4.2 | 4.0 |
| Rice [3], do | 12.9 | 12.8 | 12.6 | 7.9 | 7.5 |
| Rolled oats, do | 9.4 | 8.9 | 8.6 | 7.1 | 7.1 |
| Flour, pancake [3], 20 ounces | 12.1 | 12.1 | 10.5 | (4) | (4) |
| Bakery products: | | | | | |
| Bread, white, pound | 8.8 | 8.7 | 8.9 | 7.8 | 7.8 |
| Bread, whole-wheat, do | 9.7 | 9.7 | 9.7 | 8.7 | 8.8 |
| Bread, rye, do | 9.9 | 9.9 | 10.0 | 9.0 | 9.2 |
| Vanilla cookies, do | 28.7 | 28.5 | 29.3 | 25.1 | (5) |
| Soda crackers, do | 18.9 | 19.0 | 17.7 | 15.0 | 14.8 |
| **Meats:** | | | | | |
| Beef: | | | | | |
| Round steak, do | 41.6 | 41.8 | 47.0 | 38.6 | 38.4 |
| Rib roast, do | 33.7 | 33.7 | 37.6 | 31.5 | 28.9 |
| Chuck roast, do | 28.9 | 29.0 | 31.7 | 25.2 | 22.5 |
| Stew meat [3], do | 31.5 | 31.5 | 34.9 | (4) | (4) |
| Liver, do | 37.3 | 37.1 | 37.6 | (4) | (4) |
| Hamburger, do | 28.0 | 28.0 | 32.1 | (4) | (4) |
| Veal: | | | | | |
| Cutlets, do | 45.1 | 45.5 | 50.7 | 45.2 | 42.5 |
| Roast, boned and rolled [3], do | 35.0 | [6]35.2 | 38.0 | (4) | (4) |
| Pork: | | | | | |
| Chops, do | 37.3 | 37.3 | 41.9 | 29.1 | 30.9 |
| Bacon, sliced, do | 41.2 | 41.1 | 45.7 | 30.1 | 30.4 |
| Ham, sliced, do | 51.1 | 51.0 | 58.8 | 45.1 | 46.4 |
| Ham, whole, do | 35.6 | 35.4 | 39.8 | 26.2 | 27.4 |
| Salt pork, do | 22.4 | 22.5 | 24.7 | 16.7 | 15.4 |
| Liver [3], do | 22.0 | 22.1 | 23.5 | (4) | (4) |
| Sausage [3], do | 38.2 | 38.2 | 38.1 | (4) | (4) |
| Bologna, big [3], do | 34.2 | 35.2 | 34.1 | (4) | (4) |
| Lamb: | | | | | |
| Leg, do | 40.1 | 40.0 | 41.8 | 27.8 | 27.6 |
| Rib chops, do | 45.3 | 45.2 | 49.3 | 35.0 | 30.7 |
| Poultry: Roasting chickens, do | 46.0 | 46.5 | 44.4 | 31.1 | 30.9 |
| Fish: | | | | | |
| Fish (fresh, frozen), do | (7) | (7) | (7) | (7) | (7) |
| Salmon, pink, 16-oz. can | 23.7 | 24.1 | 24.1 | 15.7 | 12.8 |
| Salmon, red [3], do | 45.4 | 42.9 | 41.6 | 26.4 | 23.1 |
| **Dairy products:** | | | | | |
| Butter, pound | 49.9 | 50.0 | 50.5 | 38.0 | 30.7 |
| Cheese, do | 36.0 | 36.0 | 38.5 | 27.0 | 24.7 |
| Milk, fresh (delivered), quart | 15.6 | 15.6 | 15.5 | 13.0 | 12.0 |
| Milk, fresh (store), do | 14.5 | 14.5 | 14.4 | 11.9 | 11.0 |
| Milk, evaporated, 14½-oz. can | 10.0 | 10.0 | 10.1 | 7.1 | 6.7 |
| **Eggs:** | | | | | |
| Eggs, fresh, dozen | 45.7 | 44.9 | 51.7 | 34.9 | 32.0 |
| **Fruits and vegetables:** | | | | | |
| Fresh fruits: | | | | | |
| Apples, pound | 12.1 | 11.8 | 14.9 | 5.2 | 4.4 |
| Bananas, do | 11.4 | 11.4 | 11.7 | 6.6 | 6.1 |
| Oranges, dozen | 48.2 | 46.8 | 43.7 | 27.3 | 31.5 |
| Grapefruit [3], each | 9.2 | 8.7 | 8.7 | (8) | (8) |
| Fresh vegetables: | | | | | |
| Beans, green, pound | 16.6 | 19.5 | 15.8 | 14.0 | 7.2 |
| Cabbage, do | 5.4 | 5.6 | 10.0 | 3.4 | 3.9 |
| Carrots, bunch | 8.5 | 8.4 | 8.3 | 6.0 | 4.6 |
| Lettuce, head | 11.5 | 12.3 | 15.2 | 8.4 | 8.4 |
| Onions, pound | 6.5 | 9.0 | 9.0 | 3.6 | 3.6 |
| Potatoes, 15 pounds | 78.7 | 69.4 | 84.3 | 29.2 | 34.4 |
| Spinach, pound | 9.7 | 9.2 | 10.2 | 7.3 | 7.8 |
| Sweetpotatoes, do | 12.7 | 12.2 | 18.1 | 5.0 | 5.5 |
| Beets [3], bunch | 10.7 | 10.5 | 11.6 | (4) | (8) |
| Canned fruits: | | | | | |
| Peaches, No. 2½ can | 27.5 | 27.3 | 26.5 | 16.5 | 17.1 |
| Pineapple, do | 27.5 | 27.5 | 28.3 | 20.9 | 21.0 |
| Grapefruit juice, No. 2 can | 14.4 | 14.4 | 14.1 | (8) | (8) |

See footnotes at end of table.

TABLE 3.—*Average Retail Prices of 78 Foods in 56 Large Cities Combined,*[1] *June 1944, Compared with Earlier Months*—Continued

| Article | | 1944 | | 1943 | 1941 | 1939 |
|---|---|---|---|---|---|---|
| | | June 13 [2] | May 16 | June 15 | Jan. 14 | Aug. 15 |
| Fruits and vegetables—Continued. | | | | | | |
| Canned vegetables: | | *Cents* | *Cents* | *Cents* | *Cents* | *Cents* |
| Beans, green | No. 2 can | 13.0 | 13.1 | 14.8 | 10.0 | 10.0 |
| Corn | do | 14.4 | 14.4 | 14.0 | 10.7 | 10.4 |
| Peas | do | 13.1 | 13.2 | 15.1 | 13.2 | 13.6 |
| Tomatoes | do | 11.9 | 11.9 | 12.6 | 8.4 | 8.6 |
| Soup, vegetable [3] | 11-oz. can | 13.4 | 13.4 | 13.1 | (4) | (4) |
| Dried fruits: Prunes | pound | 17.1 | 17.1 | 16.5 | 9.6 | 8.8 |
| Dried vegetables: | | | | | | |
| Navy beans | do | 10.7 | 10.6 | 10.0 | 6.5 | 5.8 |
| Soup, dehydrated, chicken noodle [3] | ounce | 3.7 | 3.7 | 3.7 | (4) | (4) |
| Beverages: | | | | | | |
| Coffee | pound | 30.0 | 30.0 | 30.0 | 20.7 | 22.3 |
| Tea | ¼ pound | 23.9 | 23.8 | 21.6 | 17.6 | 17.2 |
| Cocoa [3] | ½ pound | 10.2 | 10.1 | 9.4 | 9.1 | 8.6 |
| Fats and oils: | | | | | | |
| Lard | pound | 18.7 | 18.7 | 19.0 | 9.3 | 9.9 |
| Shortening other than lard— | | | | | | |
| In cartons | do | 20.2 | 20.1 | 20.0 | 11.3 | 11.7 |
| In other containers | do | 24.7 | 24.7 | 24.6 | 18.3 | 20.2 |
| Salad dressing | pint | 25.6 | 25.5 | 25.2 | 20.1 | (5) |
| Oleomargarine | pound | 24.1 | 24.2 | 23.6 | 15.6 | 16.5 |
| Peanut butter | do | 28.4 | 28.5 | 33.1 | 17.9 | 17.9 |
| Oil, cooking or salad [3] | pint | 30.1 | 30.1 | 30.4 | (5) | (5) |
| Sugar and sweets: | | | | | | |
| Sugar | pound | 6.8 | 6.8 | 6.8 | 5.1 | 5.2 |
| Corn sirup | 24 ounces | 15.8 | 15.8 | 15.6 | 13.6 | 13.7 |
| Molasses [3] | 18 ounces | 15.8 | 15.8 | 15.5 | 13.4 | 13.6 |
| Apple butter [3] | 16 ounces | 13.2 | 13.2 | 12.9 | (4) | (4) |

[1] Data are based on 51 cities combined prior to January 1943.
[2] Preliminary.
[3] Not included in index.
[4] First priced, February 1943.
[5] Not priced.
[6] Revised.
[7] Composite price not computed.
[8] First priced, October 1941.

TABLE 4.—*Indexes of Average Retail Costs of All Foods, by Cities,*[1] *on Specified Dates*

[1935–39=100]

| City and regional area | 1944 | | 1943 | 1941 | 1939 |
|---|---|---|---|---|---|
| | June 13 [2] | May 16 | June 15 | Jan. 14 | Aug. 15 |
| United States | 135.7 | 135.5 | 141.9 | 97.8 | 93.5 |
| New England: | | | | | |
| Boston | 130.4 | 129.6 | 136.8 | 95.2 | 93.5 |
| Bridgeport | 131.4 | 131.4 | 143.8 | 96.5 | 93.2 |
| Fall River | 129.2 | 129.8 | 140.8 | 97.5 | 95.4 |
| Manchester | 130.9 | [6] 131.7 | 143.4 | 96.6 | 94.9 |
| New Haven | 132.6 | 133.1 | 143.1 | 93.7 | 93.7 |
| Portland, Maine | 131.1 | 131.4 | 140.6 | 95.3 | 95.9 |
| Providence | 133.4 | 131.9 | 139.7 | 96.3 | 93.7 |
| Middle Atlantic: | | | | | |
| Buffalo | 134.6 | 134.2 | 145.2 | 100.2 | 94.5 |
| Newark | 137.7 | 137.8 | 142.1 | 98.8 | 95.6 |
| New York | 136.8 | 137.0 | 141.4 | 99.5 | 95.8 |
| Philadelphia | 134.5 | 132.8 | 139.2 | 95.0 | 93.0 |
| Pittsburgh | 135.8 | 134.6 | 142.3 | 98.0 | 92.5 |
| Rochester | 131.3 | 129.5 | 138.6 | 99.9 | 92.3 |
| Scranton | 135.9 | 135.5 | 144.4 | 97.5 | 92.1 |
| East North Central: | | | | | |
| Chicago | 135.4 | 134.2 | 140.0 | 98.2 | 92.3 |
| Cincinnati | 138.4 | 133.7 | 139.2 | 96.5 | 90.4 |
| Cleveland | 141.3 | 141.9 | 149.5 | 99.2 | 93.6 |
| Columbus, Ohio | 127.1 | 127.1 | 134.5 | 93.4 | 88.1 |
| Detroit | 133.0 | 132.4 | 141.6 | 97.0 | 90.6 |
| Indianapolis | 132.6 | 132.2 | 140.3 | 98.2 | 90.7 |
| Milwaukee | 135.5 | 134.4 | 138.7 | 95.9 | 91.1 |
| Peoria | 138.2 | 138.2 | 146.9 | 99.0 | 93.4 |
| Springfield, Ill | 140.9 | 140.5 | 146.4 | 96.2 | 94.1 |

See footnotes at end of table.

TABLE 4.—*Indexes of Average Retail Costs of All Foods, by Cities,*[1] *on Specified Dates*—Continued

[1935–39=100]

| City and regional area | 1944 | | 1943 | 1941 | 1939 |
|---|---|---|---|---|---|
| | June 13 [2] | May 16 | June 15 | Jan. 14 | Aug. 15 |
| West North Central: | | | | | |
| Cedar Rapids [4] | 137.3 | 136.3 | 143.3 | 95.9 | |
| Kansas City | 130.5 | 131.4 | 135.8 | 92.4 | 91.5 |
| Minneapolis | 129.0 | 129.5 | 134.1 | 99.0 | 95.0 |
| Omaha | 131.1 | 131.2 | 137.7 | 97.9 | 92.3 |
| St. Louis | 138.7 | 137.8 | 143.5 | 99.2 | 93.9 |
| St. Paul | 128.1 | 127.9 | 133.7 | 98.6 | 94.3 |
| Wichita [4] | 146.2 | 145.5 | 149.7 | 97.2 | |
| South Atlantic: | | | | | |
| Atlanta | 135.2 | 135.4 | 143.9 | 94.3 | 92.5 |
| Baltimore | 141.2 | 140.5 | 152.5 | 97.9 | 94.7 |
| Charleston, S. C | 130.6 | 130.7 | 139.0 | 95.9 | 95.1 |
| Jacksonville | 142.9 | 143.0 | 151.7 | 98.8 | 96.8 |
| Norfolk [3] | 142.0 | 142.7 | 151.7 | 95.8 | 93.6 |
| Richmond | 134.0 | 131.9 | 139.6 | 93.7 | 92.2 |
| Savannah | 150.2 | 149.4 | 153.8 | 100.5 | 96.7 |
| Washington, D. C | 135.3 | 134.1 | 142.7 | 97.7 | 94.1 |
| Winston-Salem [4] | 135.1 | 134.2 | 139.7 | 93.7 | |
| East South Central: | | | | | |
| Birmingham | 139.8 | 138.5 | 141.9 | 96.0 | 90.7 |
| Jackson [4] | 139.3 | 140.4 | 149.6 | 105.3 | |
| Knoxville [4] | 154.1 | 152.7 | 158.5 | 97.1 | |
| Louisville | 132.9 | 130.8 | 139.5 | 95.5 | 92.1 |
| Memphis | 144.7 | 143.0 | 148.3 | 94.2 | 89.7 |
| Mobile | 142.1 | 143.4 | 149.8 | 97.9 | 93.5 |
| West South Central: | | | | | |
| Dallas | 130.8 | 133.3 | 136.6 | 92.6 | 91.7 |
| Houston | 135.0 | 135.9 | 140.0 | 102.6 | 97.8 |
| Little Rock | 133.8 | 133.9 | 140.1 | 95.6 | 94.0 |
| New Orleans | 146.9 | 148.4 | 152.2 | 101.9 | 97.6 |
| Mountain: | | | | | |
| Butte | 132.8 | 133.0 | 140.6 | 98.7 | 94.1 |
| Denver | 137.5 | 139.3 | 141.0 | 94.8 | 92.7 |
| Salt Lake City | 139.5 | 139.2 | 144.1 | 97.5 | 94.6 |
| Pacific: | | | | | |
| Los Angeles | 139.2 | 142.0 | 146.8 | 101.8 | 94.6 |
| Portland, Oreg | 144.4 | 144.7 | 152.1 | 101.7 | 96.1 |
| San Francisco | 142.5 | 144.7 | 149.8 | 99.6 | 93.8 |
| Seattle | 140.4 | 141.3 | 146.6 | 101.0 | 94.5 |

[1] Aggregate costs of 61 foods in each city (54 foods prior to March 1943), weighted to represent total purchases of wage earners and lower-salaried workers, have been combined for the United States with the use of population weights. Primary use is for time-to-time comparisons, rather than place-to-place comparisons.

[2] Preliminary.

[3] Revised.

[4] June 1940=100.

[5] Includes Portsmouth and Newport News.

TABLE 5.—*Indexes of Retail Food Costs in 56 Large Cities Combined,*[1] *1913 to June 1944*

[1935–39=100]

| Year | All-foods index | Year | All-foods index | Year and month | All-foods index |
|---|---|---|---|---|---|
| 1913 | 79.9 | 1931 | 103.9 | 1943—Continued. | |
| 1914 | 81.8 | 1932 | 86.5 | April | 140.6 |
| 1915 | 80.9 | 1933 | 84.1 | May | 143.0 |
| 1916 | 90.8 | 1934 | 93.7 | June | 141.9 |
| 1917 | 116.9 | 1935 | 100.4 | July | 138.0 |
| 1918 | 134.4 | 1936 | 101.3 | August | 137.2 |
| 1919 | 149.8 | 1937 | 105.3 | September | 137.4 |
| 1920 | 168.8 | 1938 | 97.8 | October | 138.2 |
| | | | | November | 137.3 |
| 1921 | 128.3 | 1939 | 95.2 | December | 137.1 |
| 1922 | 119.9 | 1940 | 96.6 | 1944: | |
| 1923 | 124.0 | 1941 | 105.5 | January | 136.1 |
| 1924 | 122.8 | 1942 | 123.9 | February | 134.5 |
| 1925 | 132.9 | 1943 | 138.0 | March | 134.1 |
| 1926 | 137.4 | | | April | 134.6 |
| 1927 | 132.3 | 1943: | | May | 135.5 |
| 1928 | 130.8 | January | 133.0 | June | 135.7 |
| 1929 | 132.5 | February | 133.6 | | |
| 1930 | 126.0 | March | 137.4 | | |

[1] Indexes based on 51 cities combined prior to March 1943.

# *Wholesale Prices*

## Wholesale Prices in June 1944

SEASONALLY higher prices for agricultural products, particularly fruits, vegetables, and eggs, caused the Bureau of Labor Statistics index of commodity prices in primary markets to rise 0.3 percent in June. At 104.3 percent of the 1926 average the all-commodity index of nearly 900 price series reached the highest point in nearly 19 years. The average level of prices for these commodities is 0.5 percent higher than in June of last year and 39 percent higher than at the outbreak of the war.

During the month market prices for farm products rose 1.7 percent, led by sharp increases in quotations for cattle, cotton, eggs, apples, citrus fruits, sweetpotatoes, and white potatoes in the Boston market. Prices for foods in primary markets advanced 1.4 percent, also as a result of the increase in prices for eggs and fresh fruits and vegetables.

Stronger markets for turpentine and rosin largely accounted for an increase of 0.2 percent in the building materials group index. Higher sales realization prices for gas and electricity brought average prices for fuel and lighting materials up 0.1 percent, notwithstanding lower prices for anthracite in some areas.

The index for the hides and leather products group dropped 0.5 percent as a result of lower prices for sheepskins owing to increased supplies. Lower prices for fatty acids and the usual seasonal discounts on certain fertilizer materials caused the index for the chemicals and allied products group to drop 0.2 percent in June. In addition, minor declines were reported in prices for soap products.

Average prices for raw materials rose 1.1 percent because of the pronounced increase in agricultural commodity markets. Semimanufactured commodity prices advanced 0.1 percent, while prices for finished products remained unchanged at the May level.

The rise of 1.7 percent in farm product prices at the primary market level brought the index for the group to the highest point reached since July of last year. From May to June livestock and poultry prices advanced 0.3 percent, with steers up 6 percent, cows more than 2 percent, and light hogs over 1 percent. Live poultry, on the contrary, declined more than 12 percent in both the New York and Chicago markets and sheep and heavy hogs dropped about 2 percent. The grain markets weakened on reports of bumper crops. Rye declined nearly 10 percent, wheat more than 3 percent, and oats 0.3 percent. Cotton advanced nearly 3 percent, to a 16-year peak, as a result of Congressional action in passing the price control bill which raised the loan value. Egg prices were higher in most markets, ranging from nearly 3 percent at New York to almost 14 percent at

Cincinnati. Apples advanced sharply and prices were also higher for citrus fruits, sweetpotatoes, and white potatoes at Boston. Lower prices were reported for hay, for white potatoes at New York, Chicago, and Portland (Oreg.), and for onions.

Led by an advance of 8.6 percent for fruits and vegetables, together with the increase in egg quotations, and a sharp rise in glucose, average prices for foods rose 1.4 percent during the month. In addition, higher prices were reported for bread in some cities. Prices were lower for flour in most markets. Meats declined 0.5 percent with lower prices reported for pork and dressed poultry.

A reduction of over 15 percent in quotations for sheepskins caused the index for the hides and leather products group to decline 0.5 percent. No changes were reported in prices for shoes or other leather products.

A minor increase in prices for men's cotton hosiery was not reflected in the index for the textile products group. It has remained unchanged at 97.8 percent of the 1926 average since early in the year.

Slightly lower prices for anthracite were more than offset by higher sales realization prices for gas and electricity, and the index for the fuel and lighting materials group rose 0.1 percent.

A further decline of 12.5 percent in prices for quicksilver did not affect the index for metals and metal products. It remained unchanged at 103.7 percent of the 1926 level.

Led by an increase of more than 14 percent for rosin, average prices for building materials advanced 0.2 percent during the month. Price increases were allowed by OPA for common building brick in some regions. Quotations for western pine lumber were fractionally lower than in May.

The index for chemicals and allied products fell 0.2 percent as a result of weakening prices for fatty acids and the usual seasonal discounts on potashes.

No changes were reported in prices for furniture or furnishings. Quotations were lower for certain soap products.

Except in a few instances, price movements were moderate between June 1943 and June 1944. Prices for farm products dropped 1 percent during the year because of lower market prices for livestock. Grains on the contrary were nearly 12 percent higher than in June of last year. Average wholesale prices for foods declined about 3 percent, led by decreases of more than 4 percent for fruits and vegetables and meats. Cereal products, following the advance in grain prices, rose a little more than 1 percent.

The few important changes in industrial commodity markets during the year were attributable in most instances to OPA action in granting higher ceiling prices to stimulate output or to compensate for higher production costs. Increased prices for burlap, certain cotton yard goods, and cotton hosiery brought the index for textile products up 0.4 percent during the year. The index for hides and leather products fell 1.2 percent as a result of a decline of more than 6 percent for hides and skins. Average prices for fuel and lighting materials increased 2.8 percent because of higher prices for coal and coke.

In the metals and metal products group, higher prices for certain types of farm machinery and plumbing and heating equipment were more than offset by lower prices for butts and a break in the quicksilver market, and the group index dropped 0.1 percent.

Several upward adjustments in prices of lumber, a revision in ceiling prices for cement in the Northeastern States, together with substantial increases in prices for linseed oil, rosin, and turpentine accounted for an increase of nearly 5 percent in average prices of building materials since June a year ago.

Increased excise taxes and higher quotations for fertilizer materials accounted for an increase of more than 5 percent in the index for chemicals and allied products.

An increase in ceiling prices of furniture early in 1944 was responsible for an advance of 1.5 percent in average prices for house-furnishing goods from June 1943 to June 1944. In the miscellaneous commodity group, cattle feed rose 6 percent, and paper and pulp advanced almost 3 percent.

Prices for most commodities moved sharply upward during the early part of the war. Since August 1939 farm products have advanced about 105 percent, with grains 147 percent and livestock 86 percent higher. In June, food prices at the primary market level were more than 58 percent higher than before the war. Fruits and vegetables led the advance with an increase of 135 percent. Dairy products rose 62 percent, meats 44 percent, and cereal products about 32 percent.

Among the outstanding changes in industrial commodity markets in the 5-year period of war were increases of 185 percent for drugs and pharmaceuticals (largely the result of increased excise taxes), 151 percent for fats and oils, 133 percent for cattle feed, 74 percent for cotton goods, 71 percent for lumber, 49 percent for woolen and worsted goods, over 40 percent for hides and skins, more than 30 percent for clothing, anthracite, paper and pulp, and rubber, and over 20 percent for shoes, leather, bituminous coal, coke, motor vehicles, paint materials, fertilizer materials, furniture, and automobile tires and tubes.

Percentage comparisons of the June 1944 level of wholesale prices with May 1944, June 1943, and August 1939, with corresponding index numbers, are given in table 1.

TABLE 1.—*Indexes of Wholesale Prices by Groups and Subgroups of Commodities, June 1944, Compared With May 1944, June 1943, and August 1939*

[1926=100]

| Group and subgroup | June 1944 | May 1944 | Percent of change | June 1943 | Percent of change | August 1939 | Percent of change |
|---|---|---|---|---|---|---|---|
| All commodities | 104.3 | 104.0 | +0.3 | 103.8 | +0.5 | 75.0 | +39.1 |
| Farm products | 125.0 | 122.9 | +1.7 | 126.2 | −1.0 | 61.0 | +104.9 |
| Grains | 127.2 | 129.7 | −1.9 | 113.8 | +11.8 | 51.5 | +147.0 |
| Livestock and poultry | 123.0 | 122.6 | +.3 | 128.6 | −4.4 | 66.0 | +86.4 |
| Other farm products | 124.7 | 120.4 | +3.6 | 127.2 | −2.0 | 60.1 | +107.5 |
| Foods | 106.5 | 105.0 | +1.4 | 109.6 | −2.8 | 67.2 | +58.5 |
| Dairy products | 110.3 | 110.3 | 0 | 109.5 | +.7 | 67.9 | +62.4 |
| Cereal products | 94.7 | 95.0 | −.3 | 93.6 | +1.2 | 71.9 | +31.7 |
| Fruits and vegetables | 137.7 | 126.8 | +8.6 | 143.6 | −4.1 | 58.5 | +135.4 |
| Meats | 106.1 | 106.6 | −.5 | 111.6 | −4.9 | 73.7 | +44.0 |
| Other foods | 93.0 | 91.9 | +1.2 | 97.0 | −4.1 | 60.3 | +54.2 |
| Hides and leather products | 116.4 | 117.0 | −.5 | 117.8 | −1.2 | 92.7 | +25.6 |
| Shoes | 126.3 | 126.3 | 0 | 126.4 | −.1 | 100.8 | +25.3 |
| Hides and skins | 108.4 | 111.9 | −3.1 | 116.0 | −6.6 | 77.2 | +40.4 |
| Leather | 101.3 | 101.3 | 0 | 101.3 | 0 | 84.0 | +20.6 |
| Other leather products | 115.2 | 115.2 | 0 | 115.2 | 0 | 97.1 | +18.6 |

TABLE 1.—*Indexes of Wholesale Prices by Groups and Subgroups of Commodities, June 1944, Compared With May 1944, June 1943, and August 1939*—Continued

[1926=100]

| Group and subgroup | June 1944 | May 1944 | Percent of change | June 1943 | Percent of change | August 1939 | Percent of change |
|---|---|---|---|---|---|---|---|
| Textile products | 97.8 | 97.8 | 0 | 97.4 | +0.4 | 67.8 | +44.2 |
| Clothing | 107.0 | 107.0 | 0 | 107.0 | 0 | 81.5 | +31.3 |
| Cotton goods | 113.9 | 113.9 | 0 | 112.6 | +1.2 | 65.5 | +73.9 |
| Hosiery and underwear | 70.6 | 70.5 | +0.1 | 70.5 | +.1 | 61.5 | +14.8 |
| Rayon | 30.3 | 30.3 | 0 | 30.3 | 0 | 28.5 | +6.3 |
| Silk | (1) | (1) | ---- | (1) | ---- | 44.5 | ---- |
| Woolen and worsted goods | 112.5 | 112.5 | 0 | 112.5 | 0 | 75.5 | +49.0 |
| Other textile products | 100.5 | 100.5 | 0 | 98.7 | +1.8 | 63.7 | +57.8 |
| Fuel and lighting materials | 83.3 | 83.2 | +.1 | 81.0 | +2.8 | 72.6 | +14.7 |
| Anthracite | 95.5 | 96.4 | −.9 | 89.5 | +6.7 | 72.1 | +32.5 |
| Bituminous coal | 120.4 | 120.4 | 0 | 116.4 | +3.4 | 96.0 | +25.4 |
| Coke | 130.7 | 130.7 | 0 | 122.4 | +6.8 | 104.2 | +25.4 |
| Electricity | (1) | (1) | ---- | 58.8 | ---- | 75.8 | ---- |
| Gas | (1) | 78.4 | ---- | 79.1 | ---- | 86.7 | ---- |
| Petroleum and products | 64.0 | 64.0 | 0 | 62.6 | +2.2 | 51.7 | +23.8 |
| Metals and metal products | 103.7 | 103.7 | 0 | 103.8 | −.1 | 93.2 | +11.3 |
| Agricultural implements | 97.2 | 97.2 | 0 | 96.9 | +.3 | 93.5 | +4.0 |
| Farm machinery | 98.4 | 98.4 | 0 | 98.0 | +.4 | 94.7 | +3.9 |
| Iron and steel | 97.1 | 97.1 | 0 | 97.3 | −.2 | 95.1 | +2.1 |
| Motor vehicles | 112.8 | 112.8 | 0 | 112.8 | 0 | 92.5 | +21.9 |
| Nonferrous metals | 85.8 | 85.8 | 0 | 86.0 | −.2 | 74.6 | +15.0 |
| Plumbing and heating | 92.4 | 92.4 | 0 | 90.4 | +2.2 | 79.3 | +16.5 |
| Building materials | 115.9 | 115.7 | +.2 | 110.6 | +4.8 | 89.6 | +29.4 |
| Brick and tile | 100.6 | 100.5 | +.1 | 99.0 | +1.6 | 90.5 | +11.2 |
| Cement | 96.4 | 96.4 | 0 | 93.6 | +3.0 | 91.3 | +5.6 |
| Lumber | 154.0 | 154.0 | 0 | 136.3 | +13.0 | 90.1 | +70.9 |
| Paint and paint materials | 105.7 | 104.7 | +1.0 | 102.0 | +3.6 | 82.1 | +28.7 |
| Plumbing and heating | 92.4 | 92.4 | 0 | 90.4 | +2.2 | 79.3 | +16.5 |
| Structural steel | 170.3 | 107.3 | 0 | 107.3 | 0 | 107.3 | 0 |
| Other building materials | 103.0 | 103.0 | 0 | 101.7 | +1.3 | 89.5 | +15.1 |
| Chemicals and allied products | 105.2 | 105.4 | −.2 | 100.0 | +5.2 | 74.2 | +41.8 |
| Chemicals | 96.2 | 96.3 | −.1 | 96.4 | −.2 | 83.8 | +14.8 |
| Drugs and pharmaceuticals | 220.1 | 220.1 | 0 | 165.2 | +33.2 | 77.1 | +185.5 |
| Fertilizer materials | 79.9 | 81.4 | −1.8 | 78.6 | +1.7 | 65.5 | +22.0 |
| Mixed fertilizers | 86.3 | 86.3 | 0 | 85.8 | +.6 | 73.1 | +18.1 |
| Oils and fats | 102.0 | 102.0 | 0 | 102.0 | 0 | 40.6 | +151.2 |
| Housefurnishing goods | 104.3 | 104.3 | 0 | 102.8 | +1.5 | 85.6 | +21.8 |
| Furnishings | 107.2 | 107.2 | 0 | 107.3 | −.1 | 90.0 | +19.1 |
| Furniture | 101.4 | 101.4 | 0 | 98.1 | +3.4 | 81.1 | +25.0 |
| Miscellaneous | 93.5 | 93.5 | 0 | 91.8 | +1.9 | 73.3 | +27.6 |
| Automobile tires and tubes | 73.0 | 73.0 | 0 | 73.0 | 0 | 60.5 | +20.7 |
| Cattle feed | 159.6 | 159.6 | 0 | 150.6 | +6.0 | 68.4 | +133.3 |
| Paper and pulp | 107.2 | 107.2 | 0 | 104.3 | +2.8 | 80.0 | +34.0 |
| Rubber, crude | 46.2 | 46.2 | 0 | 46.2 | 0 | 34.9 | +32.4 |
| Other miscellaneous | 96.7 | 96.8 | −.1 | 94.9 | +1.9 | 81.3 | +18.9 |
| Raw materials | 114.2 | 113.0 | +1.1 | 114.3 | −.1 | 66.5 | +71.7 |
| Semimanufactured articles | 93.8 | 93.7 | +.1 | 92.8 | +1.1 | 74.5 | +25.9 |
| Manufactured products | 100.9 | 100.9 | 0 | 100.1 | +.8 | 79.1 | +27.6 |
| All commodities other than farm products | 99.6 | 99.7 | −.1 | 98.7 | +.9 | 77.9 | +27.9 |
| All commodities other than farm products and foods | 98.5 | 98.5 | 0 | 96.8 | +1.8 | 80.1 | +23.0 |

[1] Data not available.

## *Index Numbers by Commodity Groups, 1926 to June 1944*

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1943, and by months from June 1943 to June 1944, are shown in table 2.

TABLE 2.—*Index Numbers of Wholesale Prices by Groups of Commodities*
[1926=100]

| Year and month | Farm products | Foods | Hides and leather products | Textile products | Fuel and lighting materials | Metals and metal products | Building materials | Chemicals and allied products | House-furnishing goods | Miscellaneous | All commodities |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1926 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1929 | 104.9 | 99.9 | 109.1 | 90.4 | 83.0 | 100.5 | 95.4 | 94.0 | 94.3 | 82.6 | 95.3 |
| 1932 | 48.2 | 61.0 | 72.9 | 54.9 | 70.3 | 80.2 | 71.4 | 73.9 | 75.1 | 64.4 | 64.8 |
| 1933 | 51.4 | 60.5 | 80.9 | 64.8 | 66.3 | 79.8 | 77.0 | 72.1 | 75.8 | 62.5 | 65.9 |
| 1936 | 80.9 | 82.1 | 95.4 | 71.5 | 76.2 | 87.0 | 86.7 | 78.7 | 81.7 | 70.5 | 80.8 |
| 1937 | 86.4 | 85.5 | 104.6 | 76.3 | 77.6 | 95.7 | 95.2 | 82.6 | 89.7 | 77.8 | 86.3 |
| 1938 | 68.5 | 73.6 | 92.8 | 66.7 | 76.5 | 95.7 | 90.3 | 77.0 | 86.8 | 73.3 | 78.6 |
| 1939 | 65.3 | 70.4 | 95.6 | 69.7 | 73.1 | 94.4 | 90.5 | 76.0 | 86.3 | 74.8 | 77.1 |
| 1940 | 67.7 | 71.3 | 100.8 | 73.8 | 71.7 | 95.8 | 94.8 | 77.0 | 88.5 | 77.3 | 78.6 |
| 1941 | 82.4 | 82.7 | 108.3 | 84.8 | 76.2 | 99.4 | 103.2 | 84.6 | 94.3 | 82.0 | 87.3 |
| 1942 | 105.9 | 99.6 | 117.7 | 96.9 | 78.5 | 103.8 | 110.2 | 97.1 | 102.4 | 89.7 | 98.8 |
| 1943 | 122.6 | 106.6 | 117.5 | 97.4 | 80.8 | 103.8 | 111.4 | 100.3 | 102.7 | 92.2 | 103.1 |
| *1943* | | | | | | | | | | | |
| June | 126.2 | 109.6 | 117.8 | 97.4 | 81.0 | 103.8 | 110.6 | 100.0 | 102.8 | 91.8 | 103.8 |
| July | 125.0 | 107.2 | 117.8 | 97.4 | 81.0 | 103.7 | 110.7 | 100.1 | 102.6 | 92.3 | 103.2 |
| August | 123.5 | 105.8 | 117.8 | 97.4 | 80.9 | 103.7 | 112.2 | 100.2 | 102.6 | 92.6 | 103.1 |
| September | 123.1 | 105.0 | 117.8 | 97.5 | 81.0 | 103.7 | 112.5 | 100.3 | 102.6 | 93.0 | 103.1 |
| October | 122.2 | 105.1 | 117.8 | 97.6 | 81.0 | 103.7 | 112.7 | 100.4 | 102.6 | 93.1 | 103.0 |
| November | 121.4 | 105.8 | 116.5 | 97.7 | 81.2 | 103.8 | 113.1 | 100.3 | 102.8 | 93.2 | 102.9 |
| December | 121.8 | 105.6 | 117.0 | 97.7 | 82.1 | 103.8 | 113.4 | 100.4 | 102.8 | 93.3 | 103.2 |
| *1944* | | | | | | | | | | | |
| January | 121.8 | 104.9 | 117.2 | 97.7 | 82.3 | 103.7 | 113.5 | 100.4 | 104.5 | 93.2 | 103.3 |
| February | 122.5 | 104.5 | 116.9 | 97.7 | 83.1 | 103.7 | 113.6 | 100.4 | 104.2 | 93.4 | 103.6 |
| March | 123.6 | 104.6 | 116.9 | 97.8 | 83.0 | 103.7 | 114.2 | 100.4 | 104.3 | 93.5 | 103.8 |
| April | 123.2 | 104.9 | 116.9 | 97.8 | 83.0 | 103.7 | 115.2 | 105.4 | 104.3 | 93.5 | 103.9 |
| May | 122.9 | 105.0 | 117.0 | 97.8 | 83.2 | 103.7 | 115.7 | 105.4 | 104.3 | 93.5 | 104.0 |
| June | 125.0 | 106.5 | 116.4 | 97.8 | 83.3 | 103.7 | 115.9 | 105.2 | 104.3 | 93.5 | 104.3 |

The price trend for specified years and months since 1926 is shown in table 3 for the following groups of commodities: Raw materials, semimanufactured articles, manufactured products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," " Semimanufactured articles," and "Manufactured products" was shown on pages 8 to 9 of Wholesale Prices, July to December 1942 (Bulletin No. 736).

TABLE 3.—*Index Numbers of Wholesale Prices by Special Groups of Commodities*
[1926=100]

| Year and month | Raw materials | Semimanufactured articles | Manufactured products | All commodities other than farm products | All commodities other than farm products and foods |
|---|---|---|---|---|---|
| 1926 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1929 | 97.5 | 93.9 | 94.5 | 93.3 | 91.6 |
| 1932 | 55.1 | 59.3 | 70.3 | 68.3 | 70.2 |
| 1933 | 56.5 | 65.4 | 70.5 | 69.0 | 71.2 |
| 1936 | 79.9 | 75.9 | 82.0 | 80.7 | 79.6 |
| 1937 | 84.8 | 85.3 | 87.2 | 86.2 | 85.3 |
| 1938 | 72.0 | 75.4 | 82.2 | 80.6 | 81.7 |
| 1939 | 70.2 | 77.0 | 80.4 | 79.5 | 81.3 |
| 1940 | 71.9 | 79.1 | 81.6 | 80.8 | 83.0 |
| 1941 | 83.5 | 86.9 | 89.1 | 88.3 | 89.0 |
| 1942 | 100.6 | 92.6 | 98.6 | 97.0 | 95.5 |
| 1943 | 112.1 | 92.9 | 100.1 | 98.7 | 96.9 |
| *1943* | | | | | |
| June | 114.3 | 92.8 | 100.1 | 98.7 | 96.8 |
| July | 113.6 | 92.8 | 99.6 | 98.3 | 96.9 |
| Aug | 112.7 | 92.9 | 99.7 | 98.5 | 97.1 |
| Sept | 112.4 | 92.9 | 99.9 | 98.6 | 97.2 |
| Oct | 111.9 | 92.9 | 100.0 | 98.7 | 97.3 |
| Nov | 111.3 | 92.9 | 100.2 | 98.8 | 97.4 |
| Dec | 112.1 | 93.1 | 100.2 | 99.0 | 97.6 |
| *1944* | | | | | |
| Jan | 112.2 | 93.2 | 100.2 | 99.1 | 97.8 |
| Feb | 112.8 | 93.4 | 100.4 | 99.3 | 98.0 |
| Mar | 113.4 | 93.7 | 100.5 | 99.3 | 98.1 |
| Apr | 113.2 | 93.6 | 100.8 | 99.6 | 98.4 |
| May | 113.0 | 93.7 | 100.9 | 99.7 | 98.5 |
| June | 114.2 | 93.8 | 100.9 | 99.6 | 98.5 |

## *Weekly Fluctuations*

Weekly changes in wholesale prices by groups of commodities during May and June 1944 are shown by the index numbers in table 4. These indexes are not averaged to obtain an index for the month but are computed only to indicate the fluctuations from week to week.

TABLE 4.—*Weekly Index Numbers of Wholesale Prices, by Commodity Groups, May and June 1944*
[1926=100]

| Commodity group | June 24 | June 17 | June 10 | June 3 | May 27 | May 20 | May 13 | May 6 |
|---|---|---|---|---|---|---|---|---|
| All commodities | 103.7 | 103.7 | 104.0 | 103.9 | 103.9 | 103.8 | 103.6 | 103.7 |
| Farm products | 123.0 | 122.9 | 125.0 | 123.9 | 123.7 | 123.3 | 122.4 | 123.3 |
| Foods | 104.9 | 104.9 | 105.4 | 105.2 | 104.9 | 104.7 | 104.6 | 105.0 |
| Hides and leather products | 117.7 | 117.7 | 117.7 | 117.7 | 117.7 | 117.6 | 117.6 | 117.6 |
| Textile products | 97.3 | 97.3 | 97.3 | 97.3 | 97.3 | 97.3 | 97.3 | 97.3 |
| Fuel and lighting materials | 83.8 | 83.7 | 83.7 | 83.7 | 83.9 | 83.9 | 83.7 | 83.7 |
| Metals and metal products | 103.8 | 103.8 | 103.8 | 103.8 | 103.8 | 103.8 | 103.8 | 103.8 |
| Building materials | 115.9 | 115.8 | 115.8 | 115.7 | 115.6 | 115.6 | 115.0 | 115.0 |
| Chemicals and allied products | 105.3 | 105.3 | 105.3 | 105.3 | 105.4 | 105.4 | 105.4 | 106.4 |
| Housefurnishing goods | 106.0 | 106.0 | 106.0 | 106.0 | 106.0 | 106.0 | 106.0 | 106.0 |
| Miscellaneous | 93.3 | 93.3 | 93.3 | 93.3 | 93.3 | 93.3 | 93.3 | 93.3 |
| Raw materials | 113.2 | 113.1 | 114.4 | 113.8 | 113.6 | 113.3 | 112.8 | 113.3 |
| Semimanufactured articles | 93.7 | 93.7 | 93.7 | 93.6 | 93.6 | 93.6 | 93.5 | 93.5 |
| Manufactured products | 101.1 | 101.0 | 101.0 | 101.1 | 101.1 | 101.1 | 101.0 | 101.0 |
| All commodities other than farm products | 99.5 | 99.5 | 99.5 | 99.6 | 99.6 | 99.6 | 99.5 | 99.5 |
| All commodities other than farm products and foods | 98.7 | 98.7 | 98.7 | 98.7 | 98.7 | 98.7 | 98.6 | 98.6 |

# *Labor Turnover*

## Labor Turnover in Manufacturing, Mining, and Public Utilities, May 1944

FOR every 1,000 workers on factory pay rolls in May, 52 quit, 6 were discharged, 6 left to enter the armed forces, and 5 were laid off. The lay-off rate of 5 per 1,000 is the lowest since May of last year and reflects the stabilization of production needs in many industries.

The quit rate of 52 per 1,000 in May compares with a rate of 49 in April. Fifteen of the 20 major manufacturing groups reported a higher quit rate in May than during the preceding month. Quit rates above 70 per thousand were reported by the furniture, food, lumber, and tobacco groups. Primarily responsible for the large number of quits was a widespread shifting to higher-paying jobs in other groups, principally the war-industry groups. Several plants in the furniture and lumber groups reported that soldiers, working part time while stationed in the vicinity, accounted for a great many quits.

In all but one of the major manufacturing groups, the rate of hiring was greater in May than in April. The largest accession rates were reported by the four groups noted above as having the highest quit rates. In spite of a relatively low quit rate, 47 per 1,000, the ordnance group reported a high accession rate, 76 per 1,000. The large number of hires in the ordnance group can be attributed to the increased military need for big guns and heavy ammunition.

The highest discharge rate, 12 per 1,000, was reported by the transportation equipment group. This is double the rate for all manufacturing industries combined, and reflects a rate of 18 per 1,000 in the shipbuilding industry.

The total separation rate for the metal-mining group as a whole is approximately the same as for manufacturing. However, the military separation rate is a more important factor in the separations among metal miners than among those in manufacturing. Each of the metal-mining industries, in which few if any women are employed, had a military separation rate above 10 per 1,000, while not a single major manufacturing group passed this mark.

The separation rate for women employed in manufacturing was considerably higher than for men. Women were hired in sufficient numbers, however, to compensate for those leaving. Among men, there was a net decline in employment.

TABLE 1.—*Monthly Labor-Turnover Rates (per 100 Employees) in Manufacturing Industries, May 1944* [1]

| Class of turnover and year | January | February | March | April | May | June | July | August | September | October | November | December |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total separation: | | | | | | | | | | | | |
| 1944 | 6.69 | 6.52 | 7.33 | 6.78 | [2]6.97 | | | | | | | |
| 1943 | 7.11 | 7.04 | 7.69 | 7.54 | 6.57 | 7.07 | 7.56 | 8.18 | 8.16 | 7.02 | 6.37 | 6.3 |
| 1939 | 3.19 | 2.61 | 3.18 | 3.46 | 3.48 | 3.31 | 3.36 | 3.01 | 2.79 | 2.91 | 2.95 | 3.4 |
| Quit: | | | | | | | | | | | | |
| 1944 | 4.60 | 4.56 | 5.00 | 4.90 | [2]5.20 | | | | | | | |
| 1943 | 4.45 | 4.65 | 5.36 | 5.41 | 4.81 | 5.20 | 5.61 | 6.30 | 6.29 | 5.19 | 4.46 | 4.3 |
| 1939 | .85 | .64 | .82 | .76 | .68 | .73 | .70 | .82 | 1.07 | .93 | .83 | .8 |
| Discharge: | | | | | | | | | | | | |
| 1944 | .60 | .64 | .65 | .59 | [2].62 | | | | | | | |
| 1943 | .52 | .50 | .57 | .53 | .55 | .61 | .68 | .67 | .62 | .64 | .63 | .6 |
| 1939 | .10 | .10 | .13 | .10 | .13 | .12 | .12 | .14 | .14 | .17 | .15 | .1 |
| Lay-off: [3] | | | | | | | | | | | | |
| 1944 | .79 | .76 | .87 | .88 | [2].48 | | | | | | | |
| 1943 | .74 | .54 | .52 | .64 | .45 | .50 | .50 | .46 | .53 | .51 | .69 | .9 |
| 1939 | 2.24 | 1.87 | 2.23 | 2.60 | 2.67 | 2.46 | 2.54 | 2.05 | 1.58 | 1.81 | 1.97 | 2.6 |
| Military: | | | | | | | | | | | | |
| 1944 | .53 | .49 | .73 | .64 | [2].60 | | | | | | | |
| 1943 | 1.26 | 1.23 | 1.12 | .87 | .69 | .69 | .69 | .67 | .64 | .61 | .52 | .5 |
| Miscellaneous: [4] | | | | | | | | | | | | |
| 1944 | .08 | .07 | .08 | .07 | [2].07 | | | | | | | |
| 1943 | .14 | .12 | .12 | .09 | .07 | .07 | .08 | .08 | .08 | .07 | .07 | .0 |
| Accession: | | | | | | | | | | | | |
| 1944 | 6.47 | 5.46 | 5.76 | 5.53 | [2]6.20 | | | | | | | |
| 1943 | 8.28 | 7.87 | 8.32 | 7.43 | 7.18 | 8.40 | 7.83 | 7.62 | 7.73 | 7.17 | 6.62 | 5.1 |
| 1939 | 4.09 | 3.06 | 3.34 | 2.93 | 3.29 | 3.92 | 4.16 | 5.06 | 6.17 | 5.89 | 4.10 | 2.8 |

[1] Month-to-month employment changes as indicated by labor-turnover rates are not precisely comparable to those shown by the Bureau's employment and pay-roll reports, as the former are based on data for the entire month while the latter refer, for the most part, to a 1-week period ending nearest the middle of the month. In addition, labor-turnover data, beginning in January 1943, refer to all employees, whereas the employment and pay-roll reports relate only to wage earners. The labor-turnover sample is not so extensive as that of the employment and pay-roll survey—proportionately fewer small plants are included; printing and publishing, and certain seasonal industries, such as canning and preserving, are not covered.

[2] Preliminary figures.

[3] Including temporary, indeterminate, and permanent lay-offs.

[4] Data for 1939 included with quits.

TABLE 2.—*Monthly Labor-Turnover Rates (per 100 Employees) in Selected Groups and Industries,* [1] *May 1944*

| Industry | Total separation | | Quit | | Discharge | Lay-off | Military and miscellaneous | Total accession | |
|---|---|---|---|---|---|---|---|---|---|
| | May 1944 [2] | April 1944 | May 1944 [2] | April 1944 | May 1944 [2] | May 1944 [2] | May 1944 [2] | May 1944 [2] | April 1944 |
| *Manufacturing* | | | | | | | | | |
| Ordnance | 6.91 | 6.92 | 4.74 | 4.60 | 0.78 | 0.78 | 0.61 | 7.60 | 6.9 |
| Guns, howitzers, mortars, and related equipment [3] | 5.39 | 5.15 | 3.63 | 3.37 | .62 | .54 | .60 | | |
| Ammunition, except small-arms [3] | 8.08 | 8.32 | 6.07 | 6.00 | .87 | .54 | .60 | | |
| Tanks [3] | 7.15 | 7.07 | 3.57 | 3.41 | .89 | 2.15 | .54 | | |
| Sighting and fire-control equipment [3] | 3.54 | 3.09 | 2.23 | 1.85 | .43 | .16 | .72 | | |
| Iron and steel and their products | 5.33 | 4.96 | 3.84 | 3.50 | .42 | .38 | .69 | 4.67 | 3.9 |
| Blast furnaces, steel works, and rolling mills | 3.67 | 3.36 | 2.61 | 2.35 | .16 | .20 | .70 | 3.30 | 2.6 |
| Gray-iron castings | 8.47 | 8.46 | 6.48 | 6.34 | .91 | .43 | .65 | 7.86 | 7.3 |
| Malleable-iron castings | 7.02 | 5.73 | 5.96 | 4.73 | .46 | .04 | .56 | 4.93 | 3.6 |
| Steel castings | 7.67 | 7.11 | 6.06 | 5.48 | .69 | .20 | .72 | 6.06 | 5.3 |
| Cast-iron pipe and fittings | 7.31 | 5.54 | 5.30 | 3.24 | .37 | .32 | 1.32 | 7.43 | 4.7 |
| Tin cans and other tinware | 13.79 | 10.65 | 10.00 | 8.79 | 1.22 | 2.03 | .54 | 14.61 | 11.6 |
| Wire products | 3.21 | 2.79 | 2.27 | 1.86 | .23 | .11 | .60 | 4.13 | 3.5 |
| Cutlery and edge tools | 6.16 | 5.77 | 5.45 | 4.71 | .32 | .05 | .34 | 8.07 | 4.8 |
| Tools (except edge tools, machine-tools, files, and saws) | 6.63 | 6.29 | 5.23 | 4.78 | .56 | .21 | .63 | 6.15 | 4.6 |
| Hardware | 5.23 | 4.80 | 4.22 | 3.74 | .28 | .34 | .39 | 4.03 | 3.3 |

See footnotes at end of table.

TABLE 2.—*Monthly Labor-Turnover Rates (per 100 Employees) in Selected Groups and Industries,*[1] *May 1944*—Continued

| Industry | Total separation | | Quit | | Discharge | Layoff | Military and miscellaneous | Total accession | |
|---|---|---|---|---|---|---|---|---|---|
| | May 1944[2] | April 1944 | May 1944[2] | April 1944 | May 1944[2] | May 1944[2] | May 1944[2] | May 1944[2] | April 1944 |
| *Manufacturing*—Continued | | | | | | | | | |
| Iron and steel and their products—Con. | | | | | | | | | |
| Plumbers' supplies | 5.55 | 5.99 | 4.40 | 4.02 | 0.47 | 0.28 | 0.40 | 3.35 | 4.32 |
| Stoves, oil burners, and heating equipment | 9.81 | 9.30 | 6.63 | 6.07 | .96 | 1.66 | .56 | 9.54 | 9.00 |
| Steam and hot-water heating apparatus and steam fittings | 7.21 | 5.16 | 4.55 | 3.83 | .69 | 1.41 | .56 | 4.58 | 5.07 |
| Stamped and enameled ware and galvanizing | 7.97 | 8.53 | 6.19 | 6.93 | .60 | .75 | .43 | 6.71 | 7.22 |
| Fabricated structural-metal products | 9.21 | 7.64 | 6.21 | 5.23 | 1.33 | .67 | 1.00 | 8.27 | 6.92 |
| Bolts, nuts, washers, and rivets | 5.42 | 5.31 | 4.23 | 3.95 | .44 | .25 | .50 | 4.81 | 4.54 |
| Forgings, iron and steel | 5.23 | 5.19 | 3.41 | 3.74 | .80 | .17 | .85 | 3.55 | 3.46 |
| Firearms, 60 caliber and under[3] | 6.64 | 6.37 | 3.64 | 3.24 | .74 | 1.56 | .70 | ------ | ------ |
| Electrical machinery | 5.33 | 5.07 | 3.92 | 3.66 | .60 | .19 | .62 | 5.00 | 4.62 |
| Electrical equipment for industrial use | 4.56 | 4.42 | 3.04 | 2.86 | .50 | .24 | .78 | 3.98 | 3.46 |
| Radios, radio equipment, and phonographs[3] | 6.59 | 6.29 | 5.07 | 4.73 | .79 | .26 | .47 | ------ | ------ |
| Communication equipment, except radios[3] | 3.80 | 3.66 | 2.82 | 2.79 | .33 | .11 | .54 | ------ | ------ |
| Machinery, except electrical | 5.30 | 5.43 | 3.61 | 3.54 | .59 | .30 | .80 | 4.45 | 4.22 |
| Engines and turbines[3] | 4.93 | 5.22 | 3.19 | 3.27 | .65 | .30 | .79 | ------ | ------ |
| Agriculture machinery and tractors | 6.43 | 6.88 | 4.72 | 4.75 | .53 | .33 | .85 | 6.64 | 6.48 |
| Machine tools | 3.76 | 4.08 | 2.37 | 2.34 | .47 | .10 | .82 | 2.82 | 2.38 |
| Machine-tool accessories | 5.38 | 5.80 | 3.26 | 3.25 | .75 | .42 | .95 | 3.87 | 3.43 |
| Metalworking machinery and equipment, not elsewhere classified | 3.98 | 3.94 | 2.56 | 2.70 | .57 | .02 | .83 | 3.10 | 3.04 |
| Textile machinery | 5.63 | 4.34 | 4.15 | 3.51 | .13 | .40 | .95 | 4.42 | 4.50 |
| General industrial machinery, except pumps | 5.84 | 5.66 | 3.97 | 3.79 | .66 | .43 | .78 | 4.14 | 3.94 |
| Pumps and pumping equipment | 5.98 | 5.50 | 4.39 | 3.98 | .42 | .40 | .77 | 4.72 | 3.69 |
| Transportation equipment, except automobiles | 7.82 | 7.25 | 5.16 | 4.72 | 1.15 | .55 | .96 | 6.18 | 5.56 |
| Aircraft | 6.81 | 6.26 | 4.64 | 4.31 | .54 | .40 | 1.23 | 4.60 | 3.72 |
| Aircraft parts | 5.57 | 5.64 | 3.81 | 3.57 | .67 | .46 | .63 | 4.97 | 4.80 |
| Shipbuilding and repairs | 9.91 | 8.85 | 6.36 | 5.68 | 1.89 | .70 | .96 | 8.10 | 7.31 |
| Automobiles | 6.27 | 6.55 | 4.33 | 4.16 | .74 | .52 | .68 | 6.43 | 5.87 |
| Motor vehicles, bodies, and trailers | 5.50 | 6.15 | 3.38 | 3.56 | .54 | .97 | .61 | 5.92 | 5.18 |
| Motor-vehicle parts and accessories | 6.71 | 6.78 | 4.88 | 4.50 | .85 | .26 | .72 | 6.73 | 6.26 |
| Nonferrous metals and their products | 7.46 | 7.74 | 5.21 | 5.29 | .61 | .84 | .80 | 5.48 | 5.16 |
| Primary smelting and refining, except aluminum and magnesium | 4.43 | 4.27 | 3.45 | 3.17 | .22 | .14 | .62 | 3.22 | 3.22 |
| Aluminum and magnesium smelting and refining | 14.56 | 10.90 | 9.40 | 8.09 | .83 | 3.17 | 1.16 | 7.90 | 7.73 |
| Rolling and drawing of copper and copper alloys | 4.57 | 4.33 | 3.34 | 3.17 | .46 | .15 | .62 | 2.57 | 3.07 |
| Aluminum and magnesium products | 8.00 | 9.10 | 5.42 | 5.65 | .67 | .99 | .92 | 5.80 | 5.17 |
| Lighting equipment | 5.93 | 6.26 | 4.47 | 4.28 | .51 | .19 | .76 | 9.32 | 6.30 |
| Nonferrous-metal foundries, except aluminum and magnesium | 6.90 | 7.56 | 5.42 | 5.96 | .59 | .27 | .62 | 6.36 | 6.12 |
| Lumber and timber basic products | 8.95 | 9.20 | 7.39 | 7.26 | .42 | .47 | .67 | 8.33 | 7.62 |
| Sawmills | 8.72 | 8.50 | 7.07 | 6.86 | .37 | .59 | .69 | 7.52 | 7.78 |
| Planing and plywood mills | 7.44 | 8.72 | 6.17 | 6.29 | .56 | .12 | .59 | 6.80 | 5.50 |
| Furniture and finished lumber products | 11.08 | 9.89 | 9.70 | 7.91 | .59 | .34 | .45 | 10.88 | 8.61 |
| Furniture, including mattresses and bedsprings | 11.43 | 10.35 | 10.12 | 8.50 | .69 | .21 | .41 | 11.39 | 8.58 |
| Stone, clay, and glass products | 6.02 | 6.04 | 4.53 | 4.14 | .32 | .56 | .61 | 5.43 | 5.26 |
| Glass and glass products | 6.04 | 6.93 | 4.32 | 3.78 | .45 | .56 | .71 | 5.97 | 5.68 |
| Cement | 5.83 | 6.37 | 2.71 | 2.75 | .14 | 2.32 | .66 | 5.40 | 6.31 |
| Brick, tile, and terra cotta | 7.07 | 7.60 | 5.81 | 5.86 | .25 | .48 | .53 | 5.68 | 5.48 |
| Pottery and related products | 6.63 | 6.62 | 5.82 | 5.67 | .28 | .08 | .45 | 6.56 | 5.68 |

See footnotes at end of table.

TABLE 2.—*Monthly Labor-Turnover Rates (per 100 Employees) in Selected Groups and Industries,*[1] *May 1944*—Continued

| Industry | Total separation | | Quit | | Discharge | Layoff | Military and miscellaneous | Total accession | |
|---|---|---|---|---|---|---|---|---|---|
| | May 1944[2] | April 1944 | May 1944[2] | April 1944 | May 1944[2] | May 1944[2] | May 1944[2] | May 1944[2] | April 1944 |
| *Manufacturing*—Continued | | | | | | | | | |
| Textile-mill products | 6.93 | 6.88 | 5.87 | 5.66 | 0.36 | 0.27 | 0.43 | 5.50 | 5.25 |
| Cotton | 7.94 | 7.87 | 6.74 | 6.61 | .42 | .27 | .51 | 6.31 | 6.22 |
| Silk and rayon goods | 6.90 | 7.19 | 5.84 | 5.92 | .45 | .23 | .38 | 6.09 | 5.61 |
| Woolen and worsted, except dyeing and finishing | 4.47 | 4.39 | 3.71 | 3.47 | .19 | .30 | .27 | 3.34 | 3.07 |
| Hosiery, full-fashioned | 5.92 | 5.83 | 5.17 | 4.62 | .17 | .11 | .47 | 5.14 | 3.89 |
| Hosiery, seamless | 7.29 | 6.82 | 6.46 | 5.56 | .20 | .36 | .27 | 5.77 | 4.73 |
| Knitted underwear | 6.36 | 5.85 | 5.55 | 4.83 | .18 | .48 | .15 | 4.23 | 3.73 |
| Dyeing and finishing textiles, including woolen and worsted | 4.88 | 5.39 | 3.52 | 3.77 | .58 | .30 | .48 | 3.74 | 3.39 |
| Apparel and other finished textile products | 6.45 | 6.28 | 5.64 | 5.32 | .22 | .45 | .14 | 5.88 | 5.17 |
| Men's and boys' suits, coats, and overcoats | 4.71 | 4.60 | 4.29 | 3.93 | .10 | .21 | .11 | 4.52 | 4.17 |
| Men's and boys' furnishings, work clothing, and allied garments | 6.81 | 6.53 | 5.98 | 5.46 | .26 | .46 | .11 | 6.31 | 5.04 |
| Women's clothing, except corsets | 6.26 | 6.47 | 5.42 | 5.06 | .09 | .60 | .15 | 6.39 | 4.19 |
| Leather and leather products | 5.24 | 6.29 | 4.32 | 5.18 | .28 | .25 | .39 | 4.39 | 5.00 |
| Leather | 4.19 | 5.19 | 3.34 | 3.84 | .24 | .13 | .48 | 4.29 | 4.23 |
| Boots and shoes | 5.44 | 6.48 | 4.54 | 5.42 | .28 | .26 | .36 | 4.43 | 5.17 |
| Food and kindred products | 10.92 | 9.95 | 9.05 | 8.10 | .56 | .59 | .72 | 10.93 | 8.40 |
| Meat products | 11.33 | 10.36 | 9.27 | 8.38 | .60 | .56 | .90 | 11.71 | 8.33 |
| Grain-mill products | 9.39 | 9.20 | 7.44 | 7.21 | .63 | .59 | .73 | 9.45 | 6.73 |
| Tobacco manufactures | 7.79 | 7.83 | 7.13 | 6.63 | .29 | .13 | .24 | 7.15 | 5.78 |
| Paper and allied products | 6.52 | 6.92 | 5.19 | 5.55 | .41 | .35 | .57 | 6.52 | 6.15 |
| Paper and pulp | 5.69 | 6.52 | 4.41 | 5.11 | .31 | .34 | .63 | 6.01 | 5.67 |
| Paper boxes | 8.86 | 8.26 | 7.29 | 6.86 | .57 | .52 | .48 | 8.39 | 7.84 |
| Chemicals and allied products | 5.88 | 6.25 | 3.61 | 3.58 | .48 | 1.08 | .71 | 4.75 | 4.57 |
| Paints, varnishes, and colors | 3.93 | 4.70 | 2.87 | 3.48 | .45 | .16 | .47 | 3.86 | 4.60 |
| Rayon and allied products | 4.32 | 4.37 | 3.13 | 2.92 | .22 | .25 | .72 | 4.09 | 4.27 |
| Industrial chemicals, except explosives | 4.84 | 4.39 | 3.42 | 3.09 | .59 | .19 | .64 | 4.39 | 4.23 |
| Explosives[3] | 4.03 | 5.54 | 2.43 | 3.01 | .32 | .28 | 1.00 | ..... | ..... |
| Small-arms ammunition[3] | 9.74 | 11.83 | 4.14 | 4.59 | .43 | 4.24 | .93 | ..... | ..... |
| Products of petroleum and coal | 3.35 | 3.20 | 2.28 | 2.32 | .35 | .18 | .54 | 3.83 | 3.78 |
| Petroleum refining | 3.27 | 3.08 | 2.22 | 2.23 | .33 | .19 | .53 | 3.75 | 3.78 |
| Rubber products | 6.66 | 6.18 | 5.55 | 5.12 | .42 | .16 | .53 | 5.56 | 5.08 |
| Rubber tires and inner tubes | 5.49 | 4.73 | 4.50 | 3.85 | .35 | .09 | .55 | 4.98 | 3.85 |
| Rubber footwear and related products | 7.39 | 6.83 | 6.57 | 6.13 | .29 | .02 | .51 | 5.85 | 5.57 |
| Miscellaneous rubber products | 7.82 | 7.60 | 6.53 | 6.28 | .52 | .25 | .52 | 6.14 | 6.06 |
| Miscellaneous industries | 4.77 | 5.20 | 3.24 | 3.46 | .42 | .47 | .64 | 4.15 | 3.69 |
| *Nonmanufacturing* | | | | | | | | | |
| Metal mining | 6.96 | 7.00 | 4.86 | 4.62 | .49 | .22 | 1.39 | 4.62 | 4.78 |
| Iron ore | 3.96 | 4.23 | 2.68 | 2.71 | .16 | .09 | 1.03 | 2.98 | 4.11 |
| Copper ore | 8.54 | 7.49 | 6.13 | 5.46 | .45 | .30 | 1.66 | 4.97 | 3.95 |
| Lead and zinc ore | 8.46 | 8.81 | 6.17 | 5.72 | .43 | .12 | 1.74 | 5.36 | 4.22 |
| Metal mining, not elsewhere classified, including aluminum ore | 8.60 | 9.57 | 5.43 | 5.61 | 1.50 | .51 | 1.16 | 6.94 | 8.69 |
| Coal mining: | | | | | | | | | |
| Anthracite | 1.74 | 2.06 | 1.32 | 1.60 | .03 | .08 | .31 | 2.01 | 1.72 |
| Bituminous | 3.64 | 3.76 | 2.85 | 2.84 | .17 | .07 | .55 | 2.84 | 2.67 |
| Public utilities: | | | | | | | | | |
| Telephone | 3.33 | 3.02 | 2.84 | 2.57 | .13 | .13 | .23 | 3.34 | 2.77 |
| Telegraph | 3.08 | 2.82 | 2.73 | 2.41 | .09 | .08 | .18 | 3.32 | 2.38 |

[1] Since January 1943 manufacturing firms reporting labor turnover have been assigned industry codes on the basis of current products. Most plants in the employment and pay-rolls sample, comprising those which were in operation in 1939, are still classified according to their major activity at that time, regardless of any subsequent change in major products.

[2] Data are preliminary.

[3] Publication of accession rates is restricted in these specific war industries.

TABLE 3.—*Monthly Labor-Turnover Rates (per 100 Employees)* [1] *for Men and Women in Selected Industries Engaged in War Production, May 1944* [2]

| Industry | Total separation | | Quit | | Total accession | |
|---|---|---|---|---|---|---|
| | Men | Women | Men | Women | Men | Women |
| All manufacturing | 6.19 | 7.72 | 4.40 | 6.42 | 5.17 | 7.73 |
| Ordnance | 6.12 | 8.44 | 3.50 | 7.16 | 6.16 | 10.42 |
| Guns, howitzers, mortars, and related equipment | 4.91 | 6.79 | 3.02 | 5.36 | 3.41 | 6.90 |
| Ammunition, except small-arms | 7.03 | 9.36 | 4.43 | 8.05 | 7.72 | 11.95 |
| Tanks | 7.06 | 8.02 | 3.20 | 6.88 | 7.77 | 9.46 |
| Sighting and fire-control equipment | 2.97 | 4.78 | 1.46 | 3.82 | 2.00 | 5.60 |
| Iron and steel and their products | 4.71 | 8.63 | 3.28 | 6.96 | 3.66 | 10.15 |
| Blast furnaces, steel works, and rolling mills | 3.39 | 6.53 | 2.31 | 5.65 | 2.63 | 9.96 |
| Gray-iron castings | 7.98 | 10.48 | 5.98 | 8.19 | 6.94 | 13.50 |
| Malleable-iron castings | 6.61 | 10.03 | 5.54 | 9.02 | 4.31 | 9.50 |
| Steel castings | 7.51 | 9.37 | 5.93 | 7.48 | 5.68 | 9.97 |
| Cast-iron pipe and fittings | 6.96 | 10.83 | 5.11 | 8.33 | 6.82 | 13.69 |
| Firearms, 60 caliber and under | 5.67 | 9.06 | 3.02 | 5.17 | 2.81 | 9.85 |
| Electrical machinery | 4.18 | 6.51 | 2.47 | 5.46 | 3.60 | 6.58 |
| Electrical equipment for industrial use | 3.45 | 6.26 | 1.87 | 4.82 | 2.50 | 6.49 |
| Radios, radio equipment, and phonographs | 5.55 | 7.35 | 3.27 | 6.35 | 5.57 | 7.70 |
| Communication equipment, except radios | 2.76 | 4.63 | 1.36 | 3.99 | 2.79 | 3.85 |
| Machinery, except electrical | 4.65 | 7.68 | 2.91 | 6.13 | 3.57 | 7.56 |
| Engines and turbines | 4.39 | 6.69 | 2.57 | 5.20 | 3.75 | 9.17 |
| Machine tools | 3.36 | 5.72 | 1.88 | 4.79 | 1.97 | 6.68 |
| Machine-tool accessories | 5.31 | 5.65 | 2.91 | 4.48 | 3.47 | 5.26 |
| Metalworking machinery and equipment, not elsewhere classified | 3.47 | 6.50 | 1.98 | 5.39 | 2.46 | 6.17 |
| General industrial machinery, except pumps | 4.90 | 8.69 | 3.05 | 6.82 | 3.41 | 6.38 |
| Pumps and pumping equipment | 5.59 | 7.68 | 3.94 | 6.31 | 3.43 | 10.33 |
| Transportation equipment, except automobiles | 7.60 | 8.42 | 4.69 | 6.59 | 5.56 | 8.05 |
| Aircraft | 6.32 | 7.57 | 3.60 | 6.27 | 3.70 | 6.01 |
| Aircraft parts | 4.87 | 7.30 | 3.15 | 5.42 | 3.82 | 7.76 |
| Shipbuilding and repairs | 9.56 | 11.79 | 5.98 | 8.83 | 7.38 | 12.88 |
| Nonferrous metals and their products | 7.23 | 8.34 | 4.97 | 6.08 | 4.85 | 7.78 |
| Primary smelting and refining, except aluminum and magnesium | 4.28 | 6.76 | 3.28 | 6.07 | 2.74 | 10.41 |
| Aluminum and magnesium smelting and refining | 14.81 | 12.49 | 9.55 | 8.14 | 7.69 | 9.63 |
| Rolling and drawing of copper and copper alloys | 4.26 | 5.56 | 2.95 | 4.61 | 2.19 | 3.84 |
| Aluminum and magnesium products | 7.44 | 10.28 | 5.14 | 6.56 | 5.32 | 7.72 |
| Nonferrous-metal foundries, except aluminum and magnesium | 6.68 | 7.43 | 4.95 | 6.54 | 5.45 | 8.48 |
| Chemicals and allied products | 4.86 | 7.89 | 2.96 | 5.05 | 3.78 | 6.71 |
| Industrial chemicals, except explosives | 4.37 | 6.87 | 3.05 | 5.03 | 3.72 | 8.38 |
| Explosives | 3.41 | 5.22 | 1.63 | 3.95 | 5.74 | 11.53 |
| Small-arms ammunition | 7.81 | 11.65 | 3.42 | 5.03 | 4.22 | 5.25 |

[1] These figures are presented to show comparative turnover rates only and should not be used to estimate employment.
[2] Data are preliminary.

## Building Construction in Urban Areas, June 1944

BUILDING construction started in urban areas of the United States during June was valued at $112,000,000, exceeding the May total by 3 percent. Non-Federal construction increased by 17 percent, whereas Federal construction showed a decrease of 24 percent. Both new residential and new nonresidential building were virtually unchanged, but additions, alterations, and repairs increased 8 percent.

The volume of work started this month was 7 percent greater than in June a year ago, with a decline in Federal construction of 29 percent offset by an increase of 31 percent in non-Federal construction. Both new nonresidential building and additions, alterations, and repairs showed increases of 16 percent and 34 percent, respectively, during this period. New residential building, however, declined by 15 percent.

TABLE 1.—*Summary of Building Construction in All Urban Areas, June 1944*

| Class of construction | Number of buildings | | | Valuation | | |
|---|---|---|---|---|---|---|
| | June 1944 | Percent of change from— | | June 1944 (in thousands) | Percent of change from— | |
| | | May 1944 | June 1943 | | May 1944 | June 1943 |
| All building construction | 66,904 | −1.1 | +10.7 | $111,714 | +2.6 | +7.4 |
| New residential | 9,764 | +6.6 | −14.5 | 35,723 | +3.2 | −14.7 |
| New nonresidential | 7,552 | −7.8 | (1) | 46,780 | −.7 | +15.8 |
| Additions, alterations, and repairs | 49,588 | −1.4 | +19.6 | 29,211 | +7.7 | +34.2 |

[1] Less than one-tenth of one percent.

The number of new dwelling units in urban areas for which building permits were issued or Federal contracts awarded during June and their valuation are presented in table 2.

TABLE 2.—*Number and Valuation of New Dwelling Units in All Urban Areas, by Source of Funds and Type of Dwelling, June 1944*

| Source of funds and type of dwelling | Number of dwelling units | | | Valuation | | |
|---|---|---|---|---|---|---|
| | June 1944 | Percent of change from— | | June 1944 (in thousands) | Percent of change from— | |
| | | May 1944 | June 1943 | | May 1944 | June 1943 |
| All dwellings | 11,266 | +1.1 | −20.3 | $35,177 | +3.2 | −15.1 |
| Privately financed | 9,973 | +2.4 | −12.7 | 31,676 | +6.3 | −11.1 |
| 1-family | 7,554 | +8.2 | +1.5 | 23,692 | +8.7 | −6.4 |
| 2-family [1] | 1,393 | +45.7 | −17.4 | 4,910 | +55.8 | +10.9 |
| Multifamily [2] | 1,026 | −43.2 | −55.3 | 3,074 | −36.5 | −68.0 |
| Federally financed | 1,293 | −7.8 | −52.3 | 3,501 | −18.4 | −38.8 |

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

## *Comparison of First Six Months of 1943 and 1944*

Permit valuations and contract values for all building construction as reported in the first 6 months of 1944 are compared with similar data for 1943 in table 3.

TABLE 3.—*Valuation of Building Construction in All Urban Areas, by Class of Construction, First 6 Months of 1943 and 1944*

| Class of construction | Valuation (in thousands of dollars) | | | | | |
|---|---|---|---|---|---|---|
| | Total construction | | | Federal construction | | |
| | First 6 months | | | First 6 months | | |
| | 1944 | 1943 | Percent of change | 1944 | 1943 | Percent of change |
| All construction | 565,462 | 646,349 | −12.5 | 178,949 | 354,009 | −49.5 |
| New residential | 198,094[1] | 299,631 | −33.9 | 28,670 | 132,921 | −78.4 |
| New nonresidential | 223,542 | 249,069 | −10.2 | 143,795 | 210,902 | −31.8 |
| Additions, alterations, and repairs | 143,826 | 97,649 | +47.3 | 6,484 | 10,186 | −36.3 |

The number and valuation of new dwelling units for which permits were issued and Federal contracts awarded during the first 6 months of 1944 are compared with similar data for 1943 in table 4.

TABLE 4.—*Number and Valuation of New Dwelling Units in All Urban Areas, by Source of Funds and Type of Dwelling, First 6 Months of 1943 and 1944*

| Source of funds and type of dwelling | Number of dwelling units | | | Valuation (in thousands of dollars) | | |
|---|---|---|---|---|---|---|
| | First 6 months of— | | Percent of change | First 6 months of— | | Percent of change |
| | 1944 | 1943 | | 1944 | 1943 | |
| All dwellings | 64,701 | 113,401 | −42.9 | 195,973 | 291,455 | −32.8 |
| Privately financed | 53,348 | 54,920 | −2.9 | 168,605 | 166,148 | +1.5 |
| 1-family | 40,234 | 37,152 | +8.3 | 127,360 | 119,508 | +6.6 |
| 2-family [1] | 5,903 | 7,253 | −18.6 | 20,181 | 19,418 | +3.9 |
| Multifamily [2] | 7,211 | 10,515 | −31.4 | 21,064 | 27,222 | −22.6 |
| Federal | 11,353 | 58,481 | −80.6 | 27,368 | 125,307 | −78.2 |

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

## *Construction From Public Funds, June 1944*

The value of contracts awarded and force-account work started during May and June 1944 and June 1943 on all construction projects and shipbuilding financed wholly or partially from Federal funds and reported to the Bureau of Labor Statistics is shown in table 5. This table includes construction both inside and outside the corporate limits of cities in urban areas of the United States.

TABLE 5.—*Value of Contracts Awarded and Force-Account Work Started on Construction Projects and Shipbuilding Financed From Federal Funds, June 1944*

| Source of Federal funds | Value of contracts awarded and force-account work started (in thousands) | | |
|---|---|---|---|
| | June 1944 [1] | May 1944 [1] | June 1943 [2] |
| All Federal funds | $121,560 | $240,257 | $2,711,078 |
| War Public Works | 9,182 | 4,183 | 5,474 |
| Regular Federal appropriations | 106,992 | 229,094 | 2,695,424 |
| Federal Public Housing Authority | 5,386 | 6,980 | 10,180 |

[1] Preliminary: Subject to revision.
[2] Revised.

## *Coverage and Method*

Figures on building construction in this report cover the entire urban area of the United States which, by Census definition includes all incorporated places with a 1940 population of 2,500 or more, and by special rule, a small number of unincorporated civil divisions. Valuation figures, the basis for statements concerning volume, are derived from the estimates of construction cost made by prospective private builders when applying for permits to build, and the value of contracts awarded by Federal and State governments. No land costs are included. Unless otherwise indicated, only building construction within the corporate limits of cities in urban areas is included in the tabulations.

Reports of building permits which were received in June 1944 for the cities containing between 80 and 85 percent of the urban population of the country provide the basis for estimating the total number of buildings and dwelling units and the valuation of private urban building construction. Similar data for Federally financed urban building construction are compiled directly from notifications of construction contracts awarded, as furnished by Federal agencies.

The contracts awarded for Federally financed building construction in urban areas were valued at $29,182,000 in June 1944, $38,171,000 in May 1944, and $40,860,000 in June 1943.

# Trend of Employment, Earnings, and Hours

## Summary of Reports for June 1944

THE total number of employees in nonagricultural establishments was 38,627,000 in June—29,000 more than in May but a million and a quarter less than in June 1943. The gain during the month reflects the addition of 91,000 workers to the finance, service, and miscellaneous division, and of 26,000 to the transportation and public utilities division. Both of these gains are seasonal in character.

### *Industrial and Business Employment*

Wage-earner employment in all manufacturing industries declined 49,000 during the month. This is considerably below the average monthly decline over the last 6 months. Employment in the durable-goods group of manufacturing industries declined by 63,000 during the month as compared with an average decline for the preceding 6 months of 94,000 per month. The nondurable-goods group of industries reported an increase of 14,000 wage earners, in contrast to an average monthly employment decline of 69,000 over the preceding half-year.

Among the durable-goods groups, 5 reported fewer wage earners in June than in May. The only sizable declines were reported by the transportation equipment and automobile groups. The combined decline in both of these groups amounted to 61,000 wage earners and reflected further declines in the aircraft and shipbuilding industries.

The increase during the month in wage-earner employment in the nondurable-goods group of manufacturing industries is the first increase since August 1943. Primarily responsible for this increase is the gain of 25,000 wage earners in the food group. Most of the industries in the food group contributed to the employment increase. The gains in the canning and beverage industries were seasonal, while the gain in the slaughtering and meat-packing industry replaced the decline which is usual at this time of the year. The employment increases in the butter, condensed milk, and ice cream industries reflect increased production occasioned by the milk surplus.

Employment in bituminous-coal mining was 354,000 in June, 2,000 less than in May. That this decrease is less than in recent months is probably due to the 90-day occupational deferments which have been granted to miners 22–25 years of age in certain areas in Pennsylvania, West Virginia, Virginia, Washington, Alabama, Tennessee, eastern Kentucky, and southern Wyoming.

TABLE 1.—*Estimated Number of Wage Earners and Indexes of Wage-Earner Employment in Manufacturing Industries, by Major Industry Groups* [1]

| Industry group | Estimated number of wage earners (thousands) | | | | Wage-earner indexes (1939 =100) | |
|---|---|---|---|---|---|---|
| | June 1944 [2] | May 1944 | April 1944 | June 1943 | June 1944 [2] | May 1944 |
| All manufacturing | 12,974 | 13,023 | 13,172 | 13,827 | 158.4 | 159.0 |
| Durable goods | 7,822 | 7,885 | 7,977 | 8,252 | 216.6 | 218.4 |
| Nondurable goods | 5,152 | 5,138 | 5,195 | 5,575 | 112.5 | 111.9 |
| Iron and steel and their products | 1,659 | 1,656 | 1,664 | 1,719 | 167.3 | 167.0 |
| Electrical machinery | 724 | 731 | 739 | 703 | 279.4 | 282.1 |
| Machinery, except electrical | 1,180 | 1,182 | 1,195 | 1,251 | 223.2 | 223.7 |
| Transportation equipment, except automobiles | 2,087 | 2,137 | 2,175 | 2,288 | 1315.0 | 1346.9 |
| Automobiles | 687 | 698 | 710 | 676 | 170.7 | 173.6 |
| Nonferrous metals and their products | 386 | 388 | 393 | 415 | 168.2 | 169.1 |
| Lumber and timber basic products | 429 | 425 | 426 | 482 | 102.0 | 101.2 |
| Furniture and finished lumber products | 338 | 336 | 340 | 358 | 103.0 | 102.3 |
| Stone, clay, and glass products | 332 | 332 | 335 | 360 | 113.1 | 113.0 |
| Textile-mill products and other fiber manufactures | 1,103 | 1,111 | 1,129 | 1,233 | 96.4 | 97.2 |
| Apparel and other finished textile products | 765 | 766 | 784 | 853 | 96.8 | 97.0 |
| Leather and leather products | 307 | 307 | 310 | 333 | 88.6 | 88.4 |
| Food | 969 | 944 | 941 | 953 | 113.4 | 110.5 |
| Tobacco manufactures | 83 | 82 | 84 | 89 | 88.4 | 88.1 |
| Paper and allied products | 303 | 303 | 306 | 316 | 114.0 | 114.2 |
| Printing, publishing, and allied industries | 332 | 329 | 332 | 334 | 101.1 | 100.3 |
| Chemicals and allied products | 585 | 593 | 602 | 743 | 202.9 | 206.6 |
| Products of petroleum and coal | 132 | 130 | 128 | 125 | 125.0 | 122.9 |
| Rubber products | 194 | 193 | 195 | 189 | 160.4 | 160.7 |
| Miscellaneous industries | 379 | 380 | 384 | 407 | 154.9 | 155.1 |

[1] The estimates and indexes presented in this table have been adjusted to final data for 1941 and preliminary data for the second quarter of 1942 made available by the Bureau of Employment Security of the Federal Security Agency.
[2] Preliminary.

## *Public Employment*

Employment in the executive branch of the Federal Governmen rose 18,000 in June 1944 to a total of 3,317,000. Employment in the War Department increased 14,000 and in the Navy Department, 5,000. Although an increase of 1,000 was shown by both the Treasury and Interior Departments and smaller increases by several other agencies, a decline of 4,000 in the Post Office Department resulted in a net decline of 2,000 for agencies other than the war agencies, their first downward turn since February 1944. The rise in war agencies and the decline in other agencies occurred both within and without the continental limits of the United States.

Employment on Federal ship-construction contracts declined 24,000 in June 1944, or nearly a quarter of the net decline over the preceding year. Employment in United States navy yards, which had declined in April and May 1944, took a slightly upward turn (1,000) in June.

Seasonal factors, which usually operate during the summer months to increase the volume of construction employment, were evident in the June 1944 figures for only streets and highways, river, harbor, and flood control, and miscellaneous types of projects. For other types the seasonal factors were overweighted by completions. The result of the the two opposing influences was total employment of 186,000 on all Federally financed projects—8,000 less than in May and 444,000 less than a year ago.

Completions on war-plant construction projects financed from RFC funds were responsible for the May–June 1944 employment decline of 8,000 and the decline over the year of 166,000.

The increase of 5,000 on the maintenance and construction of State roads, which are financed wholly from State or local funds, reflects seasonally greater activity, but the fact that the June 1944 level is 20,000 below that of June 1943 indicates increasing difficulty in obtaining manpower and materials.

For the regular Federal services, data for the legislative and judicial services are reported to the Bureau of Labor Statistics and data for executive-service employees are reported through the Civil Service Commission. The Bureau of Labor Statistics receives monthly reports on employment and pay rolls for the various construction and shipbuilding and repair projects financed wholly or partially from Federal funds, directly from the shipyards and construction contractors, and for state road projects through the Public Roads Administration.

A summary of employment and pay-roll data is shown in table 2 for the regular Federal services and in table 3 for construction and shipbuilding and repair projects financed wholly or partially from Federal funds and State road projects financed wholly from State or local funds. It should be noted that data for employees located outside continental United States are included in the figures for the regular Federal services but are excluded from those for construction and shipbuilding and repair projects. Federal workers who receive either $1 a year or month or no compensation whatever for their services are excluded.

TABLE 2.—*Employment and Pay Rolls in Regular Federal Services, June 1944*

[Subject to revision]

| Service | Employment | | | Pay rolls | | |
|---|---|---|---|---|---|---|
| | June 1944 | May 1944 | June 1943 | June 1944 | May 1944 | June 1943 |
| Executive [1] | 3,317,422 | 3,299,604 | 3,224,068 | $711,083,000 | $707,156,000 | $691,390,000 |
| War agencies [2] | 2,496,820 | 2,476,718 | 2,410,601 | 547,009,000 | 542,617,000 | 528,540,000 |
| Continental United States | 2,060,680 | 2,045,695 | 2,143,595 | [3] | [3] | [3] |
| Outside continental United States [4] | 436,140 | 431,023 | 267,006 | [3] | [3] | [3] |
| Other agencies | 820,602 | 822,886 | 813,467 | 164,074,000 | 164,539,000 | 162,850,000 |
| Continental United States | 805,662 | 807,717 | 798,949 | [3] | [3] | [3] |
| Outside continental United States [4] | 14,940 | 15,169 | 14,518 | [3] | [3] | [3] |
| Judicial | 2,679 | 2,676 | 2,622 | 781,682 | 761,004 | 749,640 |
| Legislative | 6,154 | 6,123 | 6,146 | 1,494,574 | 1,500,019 | 1,500,619 |

[1] Includes employees in United States navy yards and on temporary construction work who are also included under construction projects. Data for June 1943 are not strictly comparable with the series starting July 1943 because of the inclusion of employees on terminal leave in the earlier figure. Pay rolls for May and June 1944 are estimated.

[2] Covers War and Navy Departments, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, Office for Emergency Management, Office of Censorship, Office of Price Administration, Office of Strategic Services, Selective Service System, and the Petroleum Administration for War.

[3] Break-down not available.

[4] Includes Alaska and the Panama Canal Zone.

TABLE 3.—*Employment and Pay Rolls on Federally Financed Construction and Shipbuilding and Repair Projects* [1] *and on Locally Financed State Road Projects*

| Program and type of project | Employment (in thousands) | | | Pay rolls (in thousands) | | |
|---|---|---|---|---|---|---|
| | June 1944 [2] | May 1944 | June 1943 | June 1944 [2] | May 1944 | June 1943 |
| Federal: | | | | | | |
| Shipbuilding and repair | 1,587.7 | 1,610.7 | 1,686.6 | $446,330 | $465,168 | $443,386 |
| United States navy yards [3] | 331.2 | 330.2 | 323.8 | 94,117 | 93,852 | 82,611 |
| Private shipyards | 1,256.5 | 1,280.5 | 1,362.8 | 352,213 | 371,316 | 358,974 |
| Construction: | | | | | | |
| Financed from Federal appropriations [4] [5] | 185.9 | 194.1 | 630.0 | 35,350 | 36,884 | 126,571 |
| Airports | 18.9 | 21.2 | 96.6 | 3,618 | 4,062 | 17,940 |
| Buildings: | | | | | | |
| Residential | 27.0 | 28.3 | 92.8 | 5,759 | 6,035 | 14,990 |
| Nonresidential | 75.5 | 82.5 | 312.1 | 13,391 | 14,632 | 66,102 |
| Electrification | .5 | .6 | .9 | 95 | 111 | 144 |
| Reclamation | 14.3 | 14.5 | 25.8 | 3,224 | 3,263 | 5,111 |
| River, harbor, and flood control | 21.0 | 19.4 | 28.0 | 4,055 | 3,762 | 4,888 |
| Streets and highways | 16.3 | 15.2 | 33.4 | 2,948 | 2,753 | 5,772 |
| Water and sewer systems | 5.6 | 5.7 | 14.9 | 885 | 882 | 2,286 |
| Miscellaneous | 6.8 | 6.7 | 25.5 | 1,375 | 1,344 | 4,424 |
| Financed from RFC funds | 39.2 | 47.5 | 205.1 | 9,742 | 11,817 | 44,747 |
| State: [6] | | | | | | |
| New road construction | 13.5 | 11.5 | 27.3 | (6) | (6) | (6) |
| Road maintenance | 90.0 | 87.4 | 95.6 | (6) | (6) | (6) |

[1] Data are for continental United States exclusive of Alaska and the Panama Canal Zone. Employment data represent the weekly average; pay-roll data for construction projects are for the calendar month; pay-roll data for shipbuilding and repair are for the fiscal month.
[2] Preliminary.
[3] Excludes Washington, D. C., Navy Yard. Includes Curtis Bay Coast Guard Yard.
[4] Includes the following temporary construction employees hired directly by the Federal Government: June 1944, 27,249; May 1944, 27,937; June 1943, 55,991. These employees are also included under the Federal executive service; all other workers were employed by contractors or subcontractors.
[5] Data for June 1944 partially estimated.
[6] Data not available.

# Detailed Reports for Industrial and Business Employment, May 1944

## *Estimates of Nonagricultural Employment*

REVISED estimates of employment in nonagricultural establishments are shown in table 1. Revisions have been made in the estimates for the manufacturing, mining, and transportation divisions from January 1941 to date, and in the trade, construction, government, and service divisions from January 1939 to date. For the most part the changes were necessary to bring the series into closer agreement with trends indicated by unemployment compensation data. Comparable figures for the months from January 1939 to March 1944 were published in the July issue of the Monthly Labor Review.

The estimates are based on reports of employers to the Bureau of Labor Statistics, on unemployment-compensation data made available by the Bureau of Employment Security of the Federal Security Agency, and on information supplied by other Government agencies, such as the Interstate Commerce Commission, Civil Service Commission, Bureau of the Census, and the Bureau of Old-Age and Survivors Insurance. The estimates include all wage and salaried workers in nonagricultural establishments but exclude military personnel, proprietors, self-employed persons, and domestic servants.

Estimates of employees in nonagricultural establishments, by States, are published each month in a detailed report on employment and pay rolls.

TABLE 1.—*Estimated Number of Employees in Nonagricultural Establishments, by Industry Division* [1]

| Industry division | Estimated number of employees (in thousands) | | | |
|---|---|---|---|---|
| | May 1944 | April 1944 | March 1944 | May 1943 |
| Total estimated employment [2] | 38,598 | 38,692 | 38,725 | 39,674 |
| Manufacturing | 16,159 | 16,312 | 16,559 | 16,753 |
| Mining | 837 | 844 | 852 | 889 |
| Contract construction and Federal force-account construction | 688 | 683 | 678 | 1,385 |
| Transportation and public utilities | 3,771 | 3,744 | 3,723 | 3,597 |
| Trade | 6,961 | 6,968 | 6,919 | 6,953 |
| Finance, service, and miscellaneous | 4,250 | 4,236 | 4,123 | 4,102 |
| Federal, State and local government, excluding Federal force-account construction | 5,932 | 5,905 | 5,871 | 5,995 |

[1] The Bureau's estimates of nonagricultural employment have been revised back to January 1939. Complete monthly series and an analysis of these are available in a mimeographed release (LS 44-4087, replacing LS 44-3862): Revised Estimates of Employment in Nonagricultural Establishments in the United States, 1939-1944, which may be had upon request.

[2] Estimates include all full- and part-time wage and salary workers in nonagricultural establishments who are employed during the pay period ending nearest the 15th of the month. Proprietors, self-employed persons, domestic servants, and personnel of the armed forces are excluded.

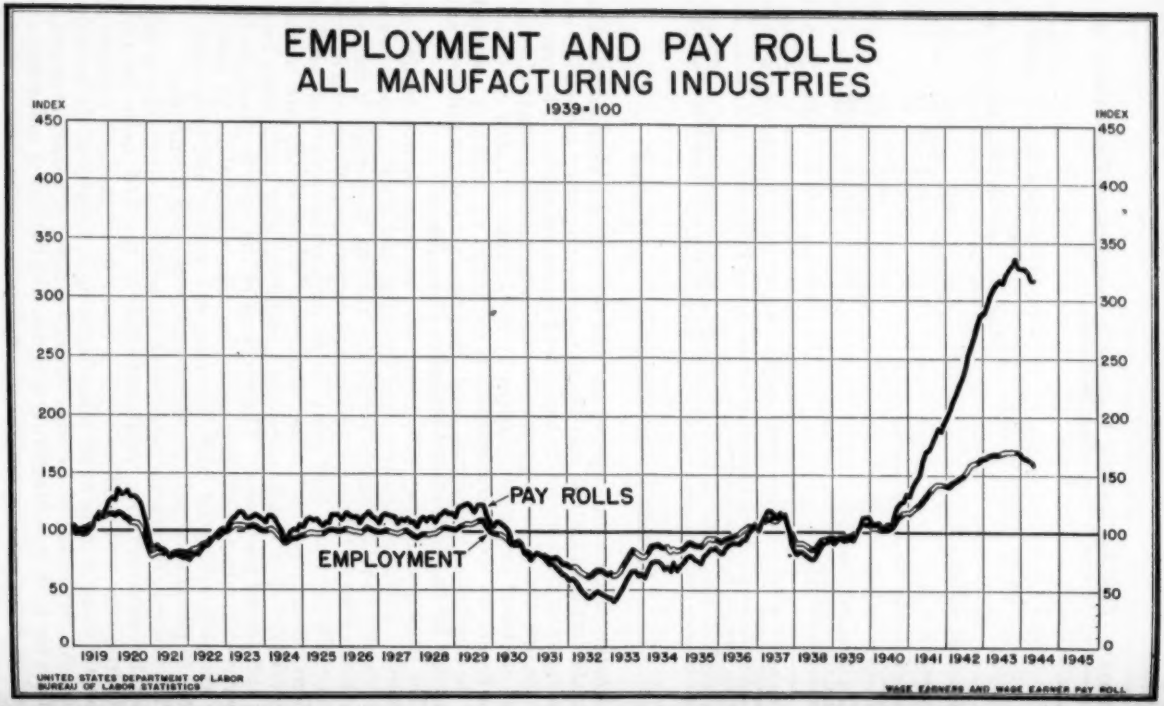
## *Industrial and Business Employment*

Monthly reports on employment and pay rolls are available for 154 manufacturing industries and for 15 nonmanufacturing industries, including water transportation and class I steam railroads. The reports for the first two of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics. The figures on water transportation are based on estimates prepared by the Maritime Commission, and those on class I steam railroads are compiled by the Interstate Commerce Commission.

The employment, pay roll, hours, and earnings figures for manufacturing, mining, laundries, and cleaning and dyeing, cover wage earners only; but the figures for public utilities, brokerage, insurance, and hotels relate to all employees except corporation officers and executives, while for trade they relate to all employees except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum production they cover wage earners and clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from about 25 percent for wholesale and retail trade, cleaning and dyeing, and insurance, to about 80 percent for public utilities and 90 percent for mining.

The general manufacturing indexes are computed from reports supplied by representative establishments in the 154 manufacturing industries surveyed. These reports cover more than 65 percent of the total wage earners in all manufacturing industries of the country and about 80 percent of the wage earners in the 154 industries covered.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and the amount of pay rolls for the pay period ending nearest the 15th of the month.


EMPLOYMENT AND PAY ROLLS
ALL MANUFACTURING INDUSTRIES
1939=100
INDEX
450
400
350
300
250
200
150
100
50
0
PAY ROLLS
EMPLOYMENT
1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
WAGE EARNERS AND WAGE EARNER PAY ROLL

## INDEXES OF EMPLOYMENT AND PAY ROLLS

Employment and pay-roll indexes, for both manufacturing and nonmanufacturing industries, for March, April, and May 1944, and for May 1943, are presented in tables 3 and 5.

The figures relating to all manufacturing industries combined, to the durable- and nondurable-goods divisions, and to the major industry groups, have been adjusted to conform to levels indicated by final data for 1941 and preliminary data for the second quarter of 1942 released by the Bureau of Employment Security of the Federal Security agency. The Bureau of Employment Security data referred to are (a) employment totals reported by employers under State unemployment-compensation programs, and (b) estimates of the number of employees not reported under the programs of some of these States, which do not cover small establishments. The latter estimates were obtained from tabulations prepared by the Bureau of Old-Age and Survivors Insurance, which obtains reports from all employers, regardless of size of establishment.

Not all industries in each major industry group are represented in the tables, since minor industries are not canvassed by the Bureau, and others cannot be shown because of their close relationship to the war program. Furthermore, no attempt has been made to allocate among the separate industries the adjustments to unemployment-compensation data. Hence, the estimates for individual industries within a group do not in general add to the total for that group.

TABLE 2.—*Estimated Number of Wage Earners in Manufacturing Industries* [1]

| Industry [2] | Estimated number of wage earners (in thousands) | | | |
|---|---|---|---|---|
| | May 1944 | April 1944 | March 1944 | May 1943 |
| All manufacturing | 13,023 | 13,172 | 13,406 | 13,700 |
| Durable goods | 7,885 | 7,977 | 8,121 | 8,159 |
| Nondurable goods | 5,138 | 5,195 | 5,285 | 5,541 |
| *Durable goods* | | | | |
| Iron and steel and their products | 1,656 | 1,664 | 1,691 | 1,718 |
| Blast furnaces, steel works, and rolling mills | 481.5 | 485.5 | 491.1 | 522.4 |
| Gray-iron and semisteel castings | 73.5 | 74.6 | 76.2 | 82.2 |
| Malleable-iron castings | 24.6 | 25.0 | 25.4 | 26.9 |
| Steel castings | 75.6 | 76.9 | 78.6 | 84.1 |
| Cast-iron pipe and fittings | 15.0 | 15.0 | 15.4 | 17.3 |
| Tin cans and other tinware | 37.5 | 36.2 | 35.7 | 31.1 |
| Wire drawn from purchased rods | 33.5 | 33.7 | 34.2 | 36.9 |
| Wirework | 34.6 | 33.9 | 33.6 | 32.3 |
| Cutlery and edge tools | 22.9 | 22.6 | 22.7 | 21.6 |
| Tools (except edge tools, machine tools, files, and saws) | 27.7 | 28.1 | 28.4 | 28.0 |
| Hardware | 45.8 | 46.6 | 47.2 | 44.6 |
| Plumbers' supplies | 22.8 | 23.1 | 23.6 | 22.8 |
| Stoves, oil burners, and heating equipment, not elsewhere classified | 61.7 | 61.2 | 61.7 | 53.1 |
| Steam and hot-water heating apparatus and steam fittings | 56.7 | 56.9 | 57.5 | 59.4 |
| Stamped and enameled ware and galvanizing | 88.5 | 89.1 | 90.5 | 88.9 |
| Fabricated structural and ornamental metalwork [3] | 76.2 | 75.4 | 75.4 | 69.4 |
| Metal doors, sash, frames, molding, and trim | 13.2 | 13.0 | 13.4 | 12.2 |
| Bolts, nuts, washers, and rivets | 27.0 | 27.6 | 28.1 | 28.9 |
| Forgings, iron and steel | 37.4 | 38.4 | 39.5 | 40.3 |
| Wrought pipe, welded and heavy riveted | 26.2 | 26.3 | 26.5 | 26.6 |
| Screw-machine products and wood screws | 46.6 | 47.1 | 48.0 | 49.8 |
| Steel barrels, kegs, and drums | 6.6 | 7.1 | 7.4 | 7.3 |
| Electrical machinery | 731 | 739 | 750 | 695 |
| Electrical equipment | 455.1 | 459.1 | 463.8 | 457.3 |

See footnotes at end of table.

599902—44——14

TABLE 2—*Estimated Number of Wage Earners in Manufacturing Industries*—Con.

| Industry [1] | Estimated number of wage earners (in thousands) | | | |
|---|---|---|---|---|
| | May 1944 | April 1944 | March 1944 | May 1943 |
| *Durable goods*—Continued | | | | |
| Machinery, except electrical | 1,182 | 1,195 | 1,219 | 1,243 |
| Machinery and machine-shop products | 472.6 | 475.6 | 484.0 | 490.9 |
| Tractors | 59.7 | 59.9 | 59.9 | 60.5 |
| Agricultural machinery, excluding tractors | 45.2 | 45.6 | 46.1 | 36.0 |
| Machine tools | 79.1 | 80.4 | 83.2 | 116.6 |
| Machine-tool accessories | 69.5 | 71.0 | 73.8 | 91.5 |
| Textile machinery | 27.6 | 27.8 | 28.1 | 28.2 |
| Pumps and pumping equipment | 80.7 | 82.4 | 83.7 | 76.2 |
| Typewriters | 11.2 | 11.5 | 12.0 | 12.1 |
| Cash registers, adding and calculating machines | 33.1 | 33.4 | 34.0 | 34.6 |
| Washing machines, wringers, and driers, domestic | 13.5 | 13.7 | 14.0 | 12.5 |
| Sewing machines, domestic and industrial | 9.3 | 9.3 | 9.4 | 10.5 |
| Refrigerators and refrigeration equipment | 52.8 | 52.9 | 54.1 | 52.9 |
| Transportation equipment, except automobiles | 2,137 | 2,175 | 2,213 | 2,241 |
| Locomotives | 36.4 | 36.3 | 35.4 | 32.6 |
| Cars, electric- and steam-railroad | 58.2 | 59.1 | 59.7 | 61.3 |
| Motorcycles, bicycles, and parts | 9.3 | 9.1 | 9.5 | 9.9 |
| Automobiles | 698 | 710 | 725 | 660 |
| Nonferrous metals and their products | 388 | 393 | 404 | 410 |
| Smelting and refining, primary, of nonferrous metals | 51.0 | 52.4 | 54.2 | 55.2 |
| Alloying and rolling and drawing of nonferrous metals, except aluminum | 71.2 | 71.8 | 72.8 | 76.0 |
| Clocks and watches | 24.8 | 24.8 | 25.2 | 24.5 |
| Jewelry (precious metals) and jewelers' findings | 14.2 | 14.3 | 14.4 | 14.3 |
| Silverware and plated ware | 10.4 | 10.5 | 10.7 | 11.8 |
| Lighting equipment | 25.3 | 25.0 | 25.3 | 22.5 |
| Aluminum manufactures | 76.1 | 78.4 | 82.1 | 73.0 |
| Sheet-metal work, not elsewhere classified | 31.4 | 31.8 | 32.6 | 28.6 |
| Lumber and timber basic products | 425 | 426 | 432 | 479 |
| Sawmills and logging camps | 232.5 | 231.5 | 234.0 | 262.5 |
| Planing and plywood mills | 72.6 | 74.3 | 76.1 | 81.1 |
| Furniture and finished lumber products | 336 | 340 | 348 | 358 |
| Mattresses and bedsprings | 16.4 | 15.9 | 15.8 | 17.9 |
| Furniture | 155.3 | 158.8 | 164.2 | 166.9 |
| Wooden boxes, other than cigar | 28.1 | 28.1 | 28.2 | 29.5 |
| Caskets and other morticians' goods | 12.4 | 12.4 | 12.5 | 11.6 |
| Wood preserving | 9.8 | 9.8 | 9.9 | 10.7 |
| Wood, turned and shaped | 21.2 | 21.7 | 21.6 | 21.7 |
| Stone, clay, and glass products | 332 | 335 | 339 | 357 |
| Glass and glassware | 91.6 | 92.6 | 92.6 | 98.9 |
| Glass products made from purchased glass | 10.4 | 10.4 | 10.7 | 11.1 |
| Cement | 17.0 | 17.2 | 17.1 | 24.5 |
| Brick, tile, and terra cotta | 42.3 | 43.2 | 44.1 | 51.2 |
| Pottery and related products | 41.2 | 41.6 | 42.1 | 43.7 |
| Gypsum | 4.2 | 4.3 | 4.5 | 4.5 |
| Wallboard, plaster (except gypsum), and mineral wool | 9.2 | 9.3 | 9.7 | 11.3 |
| Lime | 8.4 | 8.4 | 8.5 | 9.5 |
| Marble, granite, slate, and other products | 12.4 | 12.4 | 12.3 | 12.1 |
| Abrasives | 21.5 | 21.7 | 22.1 | 23.3 |
| Asbestos products | 20.8 | 21.2 | 21.7 | 21.8 |
| *Nondurable goods* | | | | |
| Textile-mill products and other fiber manufactures | 1,111 | 1,129 | 1,152 | 1,209 |
| Cotton manufactures, except smallwares | 437.9 | 445.3 | 455.3 | 468.9 |
| Cotton smallwares | 13.5 | 13.8 | 14.3 | 17.3 |
| Silk and rayon goods | 89.6 | 91.4 | 92.9 | 96.0 |
| Woolen and worsted manufactures, except dyeing and finishing | 152.1 | 155.0 | 157.8 | 160.5 |
| Hosiery | 106.5 | 107.2 | 109.4 | 117.6 |
| Knitted cloth | 10.8 | 11.0 | 11.3 | 11.9 |
| Knitted outerwear and knitted gloves | 30.0 | 30.4 | 30.7 | 32.4 |
| Knitted underwear | 36.1 | 36.7 | 37.7 | 43.6 |
| Dyeing and finishing textiles, including woolen and worsted | 62.4 | 63.0 | 63.9 | 68.7 |
| Carpets and rugs, wool | 20.3 | 20.4 | 20.7 | 23.4 |
| Hats, fur-felt | 9.5 | 9.5 | 9.8 | 10.2 |
| Jute goods, except felts | 3.3 | 3.3 | 3.4 | 4.0 |
| Cordage and twine | 15.7 | 16.1 | 16.6 | 17.2 |

See footnotes at end of table.

TABLE 2—*Estimated Number of Wage Earners in Manufacturing Industries*—Con.

| Industry [1] | Estimated number of wage earners (in thousands) | | | |
|---|---|---|---|---|
| | May 1944 | April 1944 | March 1944 | May 1943 |
| *Nondurable goods*—Continued | | | | |
| Apparel and other finished textile products | 766 | 784 | 808 | 865 |
| Men's clothing, not elsewhere classified | 212.7 | 214.2 | 216.9 | 233.7 |
| Shirts, collars, and nightwear | 53.4 | 54.1 | 54.8 | 60.9 |
| Underwear and neckwear, men's | 12.4 | 12.5 | 12.7 | 12.9 |
| Work shirts | 15.4 | 15.5 | 16.7 | 18.8 |
| Women's clothing, not elsewhere classified | 213.4 | 221.4 | 230.7 | 240.9 |
| Corsets and allied garments | 15.3 | 15.3 | 15.6 | 16.7 |
| Millinery | 18.6 | 19.4 | 20.8 | 19.5 |
| Handkerchiefs | 3.0 | 3.1 | 3.3 | 3.7 |
| Curtains, draperies, and bedspreads | 13.0 | 12.8 | 13.8 | 17.9 |
| Housefurnishings, other than curtains, etc | 9.6 | 9.6 | 10.1 | 15.0 |
| Textile bags | 14.4 | 14.9 | 15.5 | 14.8 |
| Leather and leather products | 307 | 310 | 313 | 337 |
| Leather | 40.4 | 40.7 | 41.1 | 46.9 |
| Boot and shoe cut stock and findings | 16.2 | 16.4 | 16.7 | 17.6 |
| Boots and shoes | 173.8 | 175.2 | 176.2 | 187.3 |
| Leather gloves and mittens | 12.9 | 13.2 | 13.4 | 14.6 |
| Trunks and suitcases | 11.6 | 12.2 | 12.5 | 13.5 |
| Food | 944 | 941 | 941 | 914 |
| Slaughtering and meat packing | 154.6 | 156.2 | 161.5 | 154.0 |
| Butter | 23.9 | 22.7 | 21.4 | 23.1 |
| Condensed and evaporated milk | 14.8 | 13.6 | 13.0 | 13.5 |
| Ice cream | 15.6 | 14.6 | 13.8 | 15.5 |
| Flour | 27.6 | 27.9 | 29.0 | 27.6 |
| Feeds, prepared | 19.8 | 19.9 | 20.8 | 22.3 |
| Cereal preparations | 9.3 | 9.4 | 9.5 | 9.9 |
| Baking | 253.9 | 255.0 | 257.3 | 247.2 |
| Sugar refining, cane | 14.5 | 14.0 | 14.2 | 13.2 |
| Sugar, beet | 4.4 | 4.1 | 3.6 | 4.4 |
| Confectionery | 56.6 | 57.8 | 59.0 | 53.2 |
| Beverages, nonalcoholic | 27.9 | 26.9 | 28.6 | 26.6 |
| Malt liquors | 50.1 | 48.3 | 47.8 | 44.6 |
| Canning and preserving | 98.4 | 98.6 | 90.1 | 91.7 |
| Tobacco manufactures | 82 | 84 | 84 | 90 |
| Cigarettes | 33.3 | 33.6 | 32.4 | 32.3 |
| Cigars | 36.2 | 37.1 | 38.0 | 43.9 |
| Tobacco (chewing and smoking) and snuff | 7.7 | 7.5 | 7.8 | 8.0 |
| Paper and allied products | 303 | 306 | 310 | 312 |
| Paper and pulp | 144.9 | 145.9 | 147.6 | 149.0 |
| Paper goods, other | 46.8 | 47.4 | 47.9 | 47.5 |
| Envelopes | 9.7 | 9.8 | 10.0 | 10.4 |
| Paper bags | 13.4 | 13.6 | 13.6 | 12.1 |
| Paper boxes | 79.2 | 80.3 | 82.0 | 83.4 |
| Printing, publishing, and allied industries | 329 | 332 | 336 | 329 |
| Newspapers and periodicals | 110.0 | 110.3 | 110.3 | 113.5 |
| Printing, book and job | 130.9 | 132.6 | 134.9 | 127.1 |
| Lithographing | 24.6 | 25.0 | 25.0 | 24.8 |
| Bookbinding | 28.3 | 28.9 | 30.2 | 29.1 |
| Chemicals and allied products | 593 | 602 | 625 | 739 |
| Paints, varnishes, and colors | 29.9 | 29.8 | 29.8 | 29.0 |
| Drugs, medicines, and insecticides | 51.0 | 51.9 | 52.0 | 44.2 |
| Perfumes and cosmetics | 11.2 | 11.0 | 11.1 | 11.0 |
| Soap | 13.5 | 13.6 | 13.6 | 13.0 |
| Rayon and allied products | 51.7 | 52.0 | 52.3 | 51.9 |
| Chemicals, not elsewhere classified | 120.0 | 120.2 | 120.0 | 113.5 |
| Compressed and liquefied gases | 6.1 | 6.0 | 6.0 | 6.4 |
| Cottonseed oil | 13.4 | 15.4 | 17.2 | 14.1 |
| Fertilizers | 22.6 | 26.2 | 27.8 | 24.9 |
| Products of petroleum and coal | 130 | 128 | 127 | 124 |
| Petroleum refining | 87.4 | 85.9 | 84.6 | 79.9 |
| Coke and by products | 22.9 | 22.9 | 23.0 | 25.0 |
| Paving materials | 1.5 | 1.4 | 1.4 | 1.6 |
| Roofing materials | 9.6 | 9.7 | 9.9 | 9.3 |

See footnotes at end of table.

TABLE 2.—*Estimated Number of Wage Earners in Manufacturing Industries* [1]—Con.

| Industry [2] | Estimated number of wage earners (in thousands) | | | |
|---|---|---|---|---|
| | May 1944 | April 1944 | March 1944 | May 1943 |
| *Nondurable goods*—Continued | | | | |
| Rubber products | 193 | 195 | 200 | 186 |
| Rubber tires and inner tubes | 90.1 | 91.6 | 93.6 | 83.3 |
| Rubber boots and shoes | 20.7 | 20.1 | 21.3 | 21.7 |
| Rubber goods, other | 72.9 | 74.0 | 75.9 | 72.1 |
| Miscellaneous industries | 380 | 384 | 389 | 406 |
| Photographic apparatus | 29.2 | 29.2 | 29.3 | 28.2 |
| Pianos, organs, and parts | 7.9 | 8.5 | 9.1 | 9.9 |
| Games, toys, and dolls | 15.4 | 15.7 | 15.8 | 15.6 |
| Buttons | 9.7 | 10.1 | 10.2 | 10.7 |
| Fire extinguishers | 6.3 | 6.5 | 6.7 | 8.0 |

[1] Estimates for the major industry groups have been adjusted to final data for 1941 and preliminary data for the second quarter of 1942 made available by the Bureau of Employment Security of the Federal Security Agency. Estimates for individual industries have been adjusted to levels indicated by the 1939 Census of Manufactures, but not to Federal Security Agency data. For this reason, together with the fact that this Bureau has not prepared estimates for certain industries, and does not publish wage earners in war industries, the sum of the individual industry estimates will not agree with totals shown for the major industry groups.

[2] Unpublished information concerning the following war industries may be obtained by authorized United States Government agencies upon request: Aircraft engines; aircraft and parts, excluding aircraft engines; ammunition; communication equipment; engines and turbines; explosives and safety fuses; firearms; fireworks; optical instruments and ophthalmic goods; professional and scientific instruments and fire-control equipment; radios and phonographs; and shipbuilding and boatbuilding.

[3] Revisions have been made as follows in the data published for earlier months: *Fabricated structural and ornamental metalwork.*—January and February 1944 wage earners to 75.5 and 76.2.

TABLE 3.—*Indexes of Wage-Earner Employment and of Wage-earner Pay Roll in Manufacturing Industries* [1]

[1939 average=100]

| Industry [2] | Wage-earner employment | | | | Wage-earner pay roll | | | |
|---|---|---|---|---|---|---|---|---|
| | May 1944 | Apr. 1944 | Mar. 1944 | May 1943 | May 1944 | Apr. 1944 | Mar. 1944 | May 1943 |
| All manufacturing | 159.0 | 160.8 | 163.6 | 167.2 | 318.3 | 318.2 | 324.4 | 313.5 |
| Durable goods | 218.4 | 220.9 | 224.9 | 225.9 | 445.7 | 447.9 | 454.8 | 437.1 |
| Nondurable goods | 112.2 | 113.4 | 115.4 | 121.0 | 193.7 | 191.4 | 196.9 | 192.6 |
| *Durable goods* | | | | | | | | |
| Iron and steel and their products | 167.0 | 167.8 | 170.6 | 173.2 | 308.6 | 308.0 | 314.1 | 303.5 |
| Blast furnaces, steel works, and rolling mills | 124.0 | 125.0 | 126.4 | 134.5 | 221.1 | 221.2 | 222.2 | 222.2 |
| Gray-iron and semisteel castings | 125.8 | 127.7 | 130.4 | 140.7 | 248.3 | 246.7 | 254.8 | 264.8 |
| Malleable-iron castings | 136.5 | 138.4 | 140.9 | 149.1 | 276.0 | 271.5 | 286.1 | 275.8 |
| Steel castings | 251.4 | 255.7 | 261.4 | 279.4 | 461.4 | 463.1 | 478.1 | 495.1 |
| Cast-iron pipe and fittings | 91.0 | 91.0 | 93.1 | 104.9 | 176.0 | 173.6 | 173.9 | 180.6 |
| Tin cans and other tinware | 118.2 | 114.0 | 112.3 | 97.8 | 195.5 | 188.7 | 185.7 | 155.9 |
| Wire drawn from purchased rods | 152.3 | 153.6 | 155.6 | 168.1 | 252.7 | 249.1 | 256.1 | 254.9 |
| Wirework | 113.8 | 111.6 | 110.5 | 106.3 | 225.0 | 219.6 | 218.5 | 199.4 |
| Cutlery and edge tools | 148.3 | 146.3 | 147.5 | 140.2 | 308.5 | 304.3 | 299.2 | 270.5 |
| Tools (except edge tools, machine tools, files, and saws) | 180.9 | 183.3 | 185.4 | 182.9 | 339.3 | 349.4 | 352.8 | 337.2 |
| Hardware | 128.4 | 130.8 | 132.4 | 125.2 | 260.4 | 266.0 | 270.8 | 242.1 |
| Plumbers' supplies | 92.5 | 93.9 | 95.9 | 92.6 | 167.6 | 169.3 | 174.2 | 156.4 |
| Stoves, oil burners, and heating equipment, not elsewhere classified | 133.8 | 132.7 | 133.7 | 115.1 | 252.5 | 248.3 | 254.3 | 194.1 |
| Steam and hot-water heating apparatus and steam fittings | 187.2 | 187.9 | 189.8 | 196.0 | 353.7 | 351.8 | 357.0 | 338.9 |
| Stamped and enameled ware and galvanizing | 159.3 | 160.4 | 162.9 | 160.0 | 313.0 | 312.7 | 325.6 | 299.0 |
| Fabricated structural and ornamental metalwork [3] | 214.4 | 212.1 | 212.2 | 195.5 | 435.2 | 414.7 | 423.9 | 386.1 |
| Metal doors, sash, frames, molding, and trim | 170.1 | 168.5 | 172.8 | 157.9 | 317.9 | 323.8 | 318.6 | 277.3 |
| Bolts, nuts, washers, and rivets | 188.5 | 193.2 | 196.6 | 201.7 | 369.0 | 372.4 | 389.6 | 376.7 |
| Forgings, iron and steel | 243.0 | 249.5 | 257.1 | 262.2 | 473.3 | 487.0 | 514.7 | 501.1 |
| Wrought pipe, welded and heavy riveted | 313.3 | 314.5 | 317.0 | 317.5 | 605.6 | 602.0 | 615.0 | 597.2 |
| Screw-machine products and wood screws | 275.3 | 278.2 | 283.4 | 294.4 | 535.7 | 537.6 | 550.0 | 553.2 |
| Steel barrels, kegs, and drums [3] | 108.7 | 116.3 | 121.2 | 120.6 | 214.1 | 225.0 | 242.4 | 222.2 |
| Electrical machinery | 282.1 | 285.2 | 289.4 | 268.3 | 501.0 | 502.0 | 513.2 | 458.9 |
| Electrical equipment | 251.8 | 254.0 | 256.6 | 252.9 | 456.4 | 456.4 | 465.9 | 440.9 |

See footnotes at end of table.

TABLE 3.—*Indexes of Wage-Earner Employment and of Wage-Earner Pay Roll in Manufacturing Industries* [1]—Continued

[1939 average = 100]

| Industry | Wage-earner employment | | | | Wage-earner pay roll | | | |
|---|---|---|---|---|---|---|---|---|
| | May 1944 | Apr. 1944 | Mar. 1944 | May 1943 | May 1944 | Apr. 1944 | Mar. 1944 | May 1943 |
| *Durable goods*—Continued | | | | | | | | |
| Machinery, except electrical | 223.7 | 226.1 | 230.7 | 235.2 | 420.4 | 424.3 | 432.8 | 427.2 |
| Machinery and machine-shop products | 233.6 | 235.1 | 239.2 | 242.6 | 431.5 | 429.2 | 441.1 | 432.5 |
| Tractors | 191.0 | 191.4 | 191.5 | 158.2 | 298.0 | 297.9 | 300.5 | 244.9 |
| Agricultural machinery, excluding tractors | 162.4 | 164.0 | 165.7 | 129.4 | 332.5 | 333.4 | 330.8 | 246.5 |
| Machine tools | 216.0 | 219.4 | 227.1 | 318.5 | 381.3 | 383.6 | 400.5 | 547.2 |
| Machine-tool accessories | 276.4 | 282.1 | 293.2 | 363.5 | 470.9 | 481.4 | 503.1 | 601.8 |
| Textile machinery | 125.8 | 127.0 | 128.5 | 128.5 | 227.3 | 228.6 | 233.3 | 225.2 |
| Pumps and pumping equipment | 333.0 | 339.9 | 345.2 | 314.6 | 702.8 | 768.9 | 732.3 | 645.3 |
| Typewriters | 69.0 | 70.7 | 74.2 | 74.4 | 140.2 | 141.7 | 150.2 | 144.7 |
| Cash registers, adding and calculating machines | 167.9 | 169.9 | 172.6 | 175.6 | 329.7 | 335.0 | 343.1 | 338.1 |
| Washing machines, wringers, and driers, domestic | 180.6 | 183.8 | 187.7 | 166.8 | 322.0 | 322.2 | 330.3 | 289.1 |
| Sewing machines, domestic and industrial | 119.1 | 118.4 | 120.4 | 134.4 | 258.5 | 255.2 | 261.5 | 278.1 |
| Refrigerators and refrigeration equipment | 150.1 | 150.6 | 153.8 | 150.5 | 268.9 | 269.0 | 275.8 | 250.3 |
| Transportation equipment, except automobiles | 1346.2 | 1370.1 | 1394.3 | 1412.0 | 2784.3 | 2798.0 | 2819.1 | 2736.7 |
| Locomotives | 562.7 | 561.2 | 546.6 | 503.6 | 1272.9 | 1280.1 | 1280.4 | 1028.6 |
| Cars, electric- and steam-railroad | 237.2 | 240.8 | 243.4 | 250.1 | 481.6 | 471.7 | 493.4 | 484.9 |
| Motorcycles, bicycles, and parts | 133.2 | 130.1 | 135.9 | 142.2 | 245.3 | 226.7 | 229.7 | 255.0 |
| Automobiles | 173.6 | 176.6 | 180.1 | 164.0 | 322.6 | 330.0 | 335.4 | 207.1 |
| Nonferrous metals and their products | 169.1 | 171.5 | 176.2 | 178.8 | 314.8 | 318.3 | 328.4 | 322.0 |
| Smelting and refining, primary, of nonferrous metals | 184.7 | 189.5 | 196.1 | 199.8 | 342.3 | 352.2 | 355.6 | 345.7 |
| Alloying and rolling and drawing of nonferrous metals, except aluminum | 183.5 | 184.9 | 187.6 | 195.8 | 338.6 | 340.4 | 351.6 | 354.0 |
| Clocks and watches | 122.4 | 122.4 | 124.3 | 120.7 | 253.2 | 249.6 | 253.4 | 233.9 |
| Jewelry (precious metals) and jewelers' findings | 98.3 | 99.0 | 99.8 | 113.2 | 160.6 | 161.3 | 161.6 | 170.6 |
| Silverware and plated ware | 86.0 | 86.7 | 88.5 | 96.9 | 155.8 | 154.4 | 158.1 | 167.1 |
| Lighting equipment | 123.4 | 122.0 | 123.6 | 114.7 | 222.4 | 217.6 | 223.3 | 204.6 |
| Aluminum manufactures | 323.2 | 333.0 | 348.5 | 309.9 | 570.1 | 584.5 | 614.9 | 554.8 |
| Sheet-metal work, not elsewhere classified | 167.7 | 169.7 | 173.7 | 159.0 | 314.2 | 319.9 | 333.0 | 288.4 |
| Lumber and timber basic products | 101.2 | 101.4 | 102.8 | 114.0 | 186.9 | 184.5 | 182.9 | 196.1 |
| Sawmills and logging camps | 80.7 | 80.4 | 81.2 | 91.2 | 152.1 | 149.1 | 146.7 | 160.4 |
| Planing and plywood mills | 99.9 | 102.2 | 104.7 | 111.7 | 169.9 | 171.3 | 173.5 | 175.5 |
| Furniture and finished lumber products | 102.3 | 103.7 | 106.0 | 108.6 | 183.6 | 182.0 | 188.2 | 178.9 |
| Mattresses and bedsprings | 89.7 | 86.8 | 86.0 | 97.6 | 154.6 | 144.5 | 147.7 | 152.9 |
| Furniture | 97.6 | 99.8 | 103.1 | 104.9 | 174.6 | 174.7 | 183.4 | 171.5 |
| Wooden boxes, other than cigar | 111.0 | 110.7 | 111.4 | 116.4 | 214.7 | 209.7 | 209.6 | 204.9 |
| Caskets and other morticians' goods | 99.9 | 99.5 | 100.2 | 94.4 | 168.8 | 165.5 | 166.6 | 148.5 |
| Wood preserving | 87.1 | 87.4 | 88.1 | 95.1 | 177.8 | 174.9 | 174.1 | 180.9 |
| Wood, turned and shaped | 96.4 | 98.5 | 98.1 | 98.6 | 171.6 | 171.2 | 169.2 | 163.7 |
| Stone, clay, and glass products | 112.9 | 114.3 | 115.5 | 121.5 | 187.7 | 187.3 | 189.4 | 187.7 |
| Glass and glassware | 131.2 | 132.6 | 132.6 | 124.5 | 208.4 | 208.7 | 211.0 | 182.8 |
| Glass products made from purchased glass | 103.7 | 103.6 | 106.6 | 110.8 | 170.1 | 166.8 | 170.6 | 160.5 |
| Cement | 71.2 | 72.3 | 71.7 | 102.8 | 108.7 | 107.8 | 103.8 | 145.3 |
| Brick, tile, and terra cotta | 74.5 | 76.0 | 77.7 | 90.3 | 118.9 | 117.3 | 121.2 | 136.2 |
| Pottery and related products | 124.6 | 125.7 | 127.2 | 131.9 | 192.5 | 193.2 | 192.9 | 191.2 |
| Gypsum | 86.1 | 87.4 | 92.0 | 90.6 | 145.5 | 148.3 | 153.9 | 154.6 |
| Wallboard, plaster (except gypsum), and mineral wool | 113.0 | 114.9 | 119.4 | 139.6 | 195.5 | 207.7 | 216.7 | 231.3 |
| Lime | 88.4 | 89.3 | 89.5 | 100.2 | 174.2 | 171.9 | 166.4 | 180.2 |
| Marble, granite, slate, and other products | 67.2 | 66.7 | 66.6 | 65.5 | 101.5 | 98.4 | 95.5 | 92.1 |
| Abrasives | 278.3 | 280.7 | 286.1 | 300.5 | 468.2 | 461.2 | 467.5 | 474.5 |
| Asbestos products | 131.0 | 133.3 | 136.4 | 137.5 | 255.8 | 256.7 | 268.7 | 252.7 |
| *Nondurable goods* | | | | | | | | |
| Textile-mill products and other fiber manufactures | 97.2 | 98.7 | 100.7 | 108.3 | 171.2 | 170.0 | 173.9 | 180.7 |
| Cotton manufactures, except smallwares | 110.6 | 112.5 | 115.0 | 123.7 | 202.4 | 201.3 | 202.2 | 216.0 |
| Cotton smallwares | 101.1 | 103.9 | 107.6 | 128.9 | 180.2 | 177.6 | 188.6 | 223.3 |
| Silk and rayon goods | 74.8 | 76.3 | 77.5 | 80.1 | 136.1 | 134.7 | 138.2 | 135.4 |
| Woolen and worsted manufactures, except dyeing and finishing | 102.0 | 103.9 | 105.8 | 113.8 | 192.9 | 192.5 | 199.6 | 205.0 |
| Hosiery | 67.0 | 67.4 | 68.8 | 73.9 | 105.8 | 102.9 | 108.8 | 108.2 |
| Knitted cloth | 99.0 | 100.5 | 103.4 | 108.8 | 166.1 | 167.6 | 173.6 | 173.8 |
| Knitted outerwear and knitted gloves | 106.8 | 107.9 | 109.2 | 115.3 | 188.7 | 186.2 | 188.9 | 193.3 |
| Knitted underwear | 93.6 | 95.1 | 97.8 | 110.6 | 167.4 | 168.6 | 173.7 | 184.1 |
| Dyeing and finishing textiles, including woolen and worsted | 93.3 | 94.2 | 95.6 | 102.8 | 152.2 | 151.6 | 154.9 | 156.8 |
| Carpets and rugs, wool | 79.2 | 79.6 | 80.9 | 91.3 | 132.3 | 131.2 | 134.8 | 146.9 |
| Hats, fur-felt | 65.4 | 65.6 | 67.4 | 70.3 | 120.6 | 118.5 | 124.2 | 118.9 |
| Jute goods, except felts | 92.1 | 93.0 | 95.4 | 111.9 | 173.9 | 169.6 | 180.2 | 199.1 |
| Cordage and twine | 130.1 | 133.0 | 136.9 | 141.9 | 236.8 | 240.2 | 241.1 | 237.9 |

See footnotes at end of table.

TABLE 3.—*Indexes of Wage-Earner Employment and of Wage-Earner Pay Roll in Manufacturing Industries* [1]—Continued

[1939 average=100]

| Industry [2] | Wage-earner employment | | | | Wage-earner pay roll | | | |
|---|---|---|---|---|---|---|---|---|
| | May 1944 | Apr. 1944 | Mar. 1944 | May 1943 | May 1944 | Apr. 1944 | Mar. 1944 | May 1943 |
| *Nondurable goods*—Continued | | | | | | | | |
| Apparel and other finished textile products | 97.0 | 99.3 | 102.3 | 109.6 | 162.5 | 161.3 | 178.5 | 164.3 |
| Men's clothing, not elsewhere classified | 97.3 | 97.9 | 99.2 | 106.9 | 166.4 | 158.2 | 167.3 | 162.8 |
| Shirts, collars, and nightwear | 75.8 | 76.8 | 77.8 | 86.4 | 134.4 | 130.3 | 136.6 | 136.0 |
| Underwear and neckwear, men's | 77.0 | 77.5 | 78.5 | 79.6 | 149.5 | 146.4 | 153.6 | 137.9 |
| Work shirts | 114.4 | 115.2 | 123.8 | 139.5 | 206.8 | 203.0 | 222.3 | 236.7 |
| Women's clothing, not elsewhere classified | 78.6 | 81.5 | 84.9 | 88.7 | 128.1 | 132.0 | 152.9 | 131.0 |
| Corsets and allied garments | 81.6 | 81.5 | 83.0 | 88.8 | 139.6 | 136.4 | 141.3 | 139.5 |
| Millinery | 76.6 | 79.9 | 85.7 | 80.2 | 101.9 | 109.3 | 141.2 | 96.7 |
| Handkerchiefs | 62.4 | 63.4 | 67.5 | 77.4 | 114.9 | 108.4 | 121.4 | 126.1 |
| Curtains, draperies, and bedspreads | 76.6 | 75.6 | 81.4 | 105.8 | 144.4 | 134.9 | 146.1 | 168.9 |
| Housefurnishings, other than curtains, etc | 90.5 | 90.2 | 95.0 | 141.3 | 161.4 | 153.0 | 165.2 | 240.6 |
| Textile bags | 120.4 | 124.4 | 128.9 | 123.3 | 192.3 | 194.8 | 204.4 | 181.9 |
| Leather and leather products | 88.4 | 89.4 | 90.1 | 97.0 | 153.5 | 152.3 | 153.1 | 153.0 |
| Leather | 85.5 | 86.2 | 87.0 | 99.2 | 146.8 | 147.0 | 144.9 | 150.3 |
| Boot and shoe cut stock and findings | 86.2 | 87.0 | 88.4 | 93.5 | 142.7 | 142.0 | 144.3 | 137.7 |
| Boots and shoes | 79.7 | 80.3 | 80.8 | 85.9 | 139.8 | 138.3 | 139.0 | 137.3 |
| Leather gloves and mittens | 128.9 | 131.6 | 134.2 | 146.0 | 218.6 | 221.0 | 229.2 | 222.4 |
| Trunks and suitcases | 139.8 | 146.9 | 150.0 | 162.5 | 233.2 | 229.1 | 242.3 | 256.1 |
| Food | 110.5 | 110.1 | 110.1 | 106.9 | 179.9 | 173.8 | 174.4 | 158.5 |
| Slaughtering and meat packing | 128.3 | 129.6 | 134.0 | 127.8 | 216.9 | 206.3 | 212.3 | 190.5 |
| Butter | 133.0 | 126.7 | 119.3 | 128.8 | 202.1 | 191.7 | 178.4 | 174.3 |
| Condensed and evaporated milk | 152.2 | 139.9 | 133.5 | 139.1 | 245.9 | 221.8 | 207.1 | 202.7 |
| Ice cream | 99.6 | 93.0 | 88.0 | 98.9 | 137.3 | 127.7 | 120.2 | 127.1 |
| Flour | 111.6 | 112.7 | 117.0 | 111.3 | 179.9 | 180.8 | 184.4 | 164.0 |
| Feeds, prepared | 128.5 | 129.0 | 135.2 | 144.8 | 221.2 | 213.4 | 220.0 | 235.7 |
| Cereal preparations | 124.8 | 126.1 | 128.0 | 132.2 | 216.5 | 210.4 | 220.7 | 218.1 |
| Baking | 110.1 | 110.5 | 111.5 | 107.1 | 164.3 | 160.4 | 163.0 | 147.8 |
| Sugar refining, cane | 102.7 | 98.7 | 100.3 | 92.9 | 163.7 | 153.3 | 161.6 | 124.6 |
| Sugar, beet | 42.1 | 39.6 | 34.9 | 42.1 | 60.5 | 59.5 | 51.8 | 59.8 |
| Confectionery | 113.7 | 116.1 | 118.5 | 106.9 | 183.3 | 183.4 | 191.2 | 158.0 |
| Beverages, nonalcoholic | 131.1 | 126.5 | 124.9 | 124.9 | 170.2 | 159.7 | 156.0 | 148.9 |
| Malt liquors | 138.9 | 133.8 | 132.3 | 123.6 | 201.9 | 192.1 | 185.8 | 165.3 |
| Canning and preserving | 73.1 | 73.3 | 67.0 | 68.2 | 140.8 | 139.7 | 126.8 | 117.0 |
| Tobacco manufactures | 88.3 | 89.5 | 89.5 | 96.3 | 152.9 | 142.8 | 146.6 | 144.4 |
| Cigarettes | 121.4 | 122.7 | 118.2 | 117.8 | 182.0 | 164.2 | 159.6 | 155.3 |
| Cigars | 71.1 | 72.9 | 74.7 | 86.2 | 137.9 | 133.0 | 142.8 | 141.0 |
| Tobacco (chewing and smoking) and snuff | 84.5 | 81.7 | 85.6 | 87.4 | 122.0 | 114.8 | 120.1 | 122.7 |
| Paper and allied products | 114.2 | 115.4 | 117.0 | 117.7 | 184.7 | 183.6 | 186.4 | 178.0 |
| Paper and pulp | 105.4 | 106.2 | 107.3 | 108.4 | 177.2 | 175.1 | 176.4 | 170.2 |
| Paper goods, other | 124.3 | 125.9 | 127.2 | 126.1 | 194.6 | 194.9 | 198.1 | 183.3 |
| Envelopes | 111.3 | 113.2 | 115.1 | 119.4 | 169.1 | 169.2 | 176.3 | 168.5 |
| Paper bags | 120.9 | 122.8 | 122.9 | 109.3 | 197.1 | 200.6 | 199.8 | 166.9 |
| Paper boxes | 114.5 | 116.1 | 118.6 | 120.6 | 177.2 | 177.1 | 183.0 | 178.6 |
| Printing, publishing, and allied industries | 100.3 | 101.3 | 102.5 | 100.4 | 135.0 | 133.7 | 135.2 | 128.0 |
| Newspapers and periodicals | 92.7 | 92.9 | 92.9 | 95.7 | 116.1 | 113.8 | 114.1 | 110.7 |
| Printing, book and job | 103.6 | 104.9 | 106.7 | 100.6 | 144.8 | 144.4 | 146.5 | 128.1 |
| Lithographing | 94.5 | 96.1 | 96.2 | 95.5 | 132.9 | 130.1 | 132.6 | 119.4 |
| Bookbinding | 109.8 | 112.3 | 117.2 | 112.7 | 180.9 | 182.8 | 189.3 | 170.7 |
| Chemicals and allied products | 205.6 | 208.8 | 216.8 | 256.4 | 360.2 | 359.1 | 372.5 | 425.2 |
| Paints, varnishes, and colors | 106.3 | 106.1 | 105.7 | 103.2 | 167.2 | 163.9 | 163.6 | 155.0 |
| Drugs, medicines, and insecticides | 186.1 | 189.3 | 189.7 | 161.4 | 270.7 | 267.8 | 276.1 | 227.8 |
| Perfumes and cosmetics | 107.7 | 106.5 | 107.3 | 105.8 | 153.0 | 152.8 | 151.5 | 141.9 |
| Soap | 99.4 | 100.0 | 100.5 | 95.5 | 163.6 | 165.0 | 165.0 | 136.3 |
| Rayon and allied products | 107.1 | 107.7 | 108.4 | 107.5 | 173.5 | 171.0 | 172.0 | 162.7 |
| Chemicals, not elsewhere classified | 172.5 | 172.7 | 172.5 | 163.2 | 296.5 | 295.0 | 294.1 | 263.4 |
| Compressed and liquefied gases | 154.5 | 152.6 | 151.9 | 160.4 | 271.4 | 266.6 | 263.1 | 264.7 |
| Cottonseed oil | 88.3 | 101.5 | 113.0 | 93.1 | 170.3 | 193.9 | 214.5 | 151.3 |
| Fertilizers | 120.4 | 139.4 | 148.0 | 132.8 | 269.2 | 285.7 | 305.4 | 233.6 |
| Products of petroleum and coal | 122.8 | 121.1 | 120.2 | 117.3 | 212.6 | 206.6 | 204.1 | 183.3 |
| Petroleum refining | 120.0 | 117.9 | 116.2 | 109.7 | 205.2 | 199.6 | 195.7 | 170.5 |
| Coke and byproducts | 105.6 | 105.4 | 105.9 | 115.2 | 183.0 | 178.7 | 180.4 | 178.7 |
| Paving materials | 63.6 | 57.3 | 56.5 | 66.2 | 120.4 | 100.3 | 99.6 | 107.0 |
| Roofing materials | 119.5 | 119.9 | 122.5 | 115.4 | 212.2 | 207.4 | 211.6 | 184.5 |

See footnotes at end of table.

TABLE 3.—*Indexes of Wage-Earner Employment and of Wage-Earner Pay Roll in Manufacturing Industries* [1]—Continued

[1939 average=100]

| Industry [2] | Wage-earner employment | | | | Wage-earner pay roll | | | |
|---|---|---|---|---|---|---|---|---|
| | May 1944 | Apr. 1944 | Mar. 1944 | May 1943 | May 1944 | Apr. 1944 | Mar. 1944 | May 1943 |
| *Nondurable goods*—Continued | | | | | | | | |
| Rubber products | 159.7 | 161.4 | 165.7 | 153.9 | 280.8 | 278.8 | 294.3 | 250.9 |
| Rubber tires and inner tubes | 166.5 | 169.3 | 172.9 | 153.9 | 283.0 | 280.0 | 299.3 | 243.9 |
| Rubber boots and shoes | 139.8 | 135.8 | 143.8 | 146.5 | 248.6 | 242.9 | 254.6 | 247.9 |
| Rubber goods, other | 140.8 | 143.0 | 146.7 | 139.2 | 248.3 | 249.0 | 257.6 | 228.7 |
| Miscellaneous industries | 155.1 | 157.0 | 158.8 | 166.0 | 295.8 | 296.7 | 301.3 | 297.1 |
| Photographic apparatus | 169.3 | 169.1 | 169.9 | 163.1 | 273.5 | 270.9 | 280.0 | 256.6 |
| Pianos, organs, and parts | 103.6 | 111.5 | 119.3 | 130.5 | 196.8 | 212.7 | 228.4 | 261.8 |
| Games, toys, and dolls | 82.6 | 84.0 | 84.8 | 83.7 | 159.5 | 160.1 | 160.3 | 148.6 |
| Buttons | 88.8 | 92.1 | 92.9 | 97.6 | 174.3 | 175.1 | 177.1 | 171.5 |
| Fire extinguishers | 633.2 | 656.8 | 675.1 | 807.0 | 1382.8 | 1381.0 | 1422.7 | 1500.2 |

[1] Indexes for the major industry groups have been adjusted to final data for 1941 and preliminary data for the second quarter of 1942 made available by the Bureau of Employment Security of the Federal Security Agency. Indexes for individual industries have been adjusted to levels indicated by the 1939 Census of Manufactures, but not to Federal Security Agency data.

[2] Unpublished information concerning the following war industries may be obtained by authorized United States Government agencies upon request: Aircraft engines; aircraft and parts, excluding aircraft engines; ammunition; communication equipment; engines and turbines; explosives and safety fuses; firearms; fireworks; optical instruments and ophthalmic goods; professional and scientific instruments and fire-control equipment; radios and phonographs; and shipbuilding and boatbuilding.

[3] Revisions have been made as follows in the data published for earlier months: *Fabricated structural and ornamental metalwork.*—January and February 1944 employment indexes to 212.6 and 214.6; February 1944 pay-roll index to 418.6. *Steel barrels, kegs, and drums.*—February 1944 pay-roll index to 244.8.

TABLE 4.—*Estimated Number of Wage Earners in Selected Nonmanufacturing Industries*

| Industry | Estimated number of wage earners (in thousands) | | | |
|---|---|---|---|---|
| | May 1944 | April 1944 | March 1944 | May 1943 |
| Anthracite mining | 68.5 | 68.4 | 69.1 | 72.3 |
| Bituminous-coal mining | 356 | 360 | 366 | 385 |
| Metal mining | 82.6 | 84.9 | 86.7 | 97.9 |
| Iron | 28.8 | 28.8 | 28.5 | 33.4 |
| Copper | 27.4 | 28.4 | 29.4 | 31.4 |
| Lead and zinc | 16.8 | 17.7 | 18.3 | 18.9 |
| Gold and silver | 5.8 | 6.1 | 6.3 | 7.6 |
| Miscellaneous | 3.8 | 3.9 | 4.2 | 6.6 |
| Electric light and power [1] | 202 | 203 | 204 | 211 |
| Street railways and busses [1] | 231 | 231 | 232 | 228 |
| Hotels (year-round) [1] | 352 | 352 | 352 | 341 |
| Power laundries | 248 | 247 | 249 | 267 |
| Cleaning and dyeing | 84.2 | 81.5 | 79.2 | 85.4 |
| Class I steam railroads [2] | 1,425 | 1,413 | 1,400 | 1,351 |

[1] Data include salaried personnel.

[2] Source: Interstate Commerce Commission. Data include salaried personnel.

TABLE 5.—*Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries*

[1939 average=100]

| Industry | Employment indexes | | | | Pay-roll indexes | | | |
|---|---|---|---|---|---|---|---|---|
| | May 1944 | April 1944 | March 1944 | May 1943 | May 1944 | April 1944 | March 1944 | May 1943 |
| Coal mining: | | | | | | | | |
| Anthracite | 82.7 | 82.6 | 83.5 | 87.3 | 155.8 | 142.3 | 157.8 | 127.1 |
| Bituminous | 96.0 | 97.1 | 98.7 | 103.8 | 215.5 | 214.2 | 225.0 | 178.4 |
| Metal mining | 93.6 | 96.2 | 98.3 | 110.9 | 148.1 | 152.5 | 155.5 | 176.2 |
| Iron | 142.4 | 142.8 | 141.7 | 166.2 | 229.4 | 229.2 | 223.4 | 261.5 |
| Copper | 115.1 | 118.8 | 123.1 | 131.9 | 186.3 | 191.4 | 202.0 | 213.2 |
| Lead and zinc | 108.4 | 114.2 | 117.8 | 121.7 | 196.5 | 209.2 | 215.4 | 206.0 |
| Gold and silver | 23.5 | 24.8 | 25.5 | 30.6 | 30.1 | 32.7 | 33.4 | 38.5 |
| Miscellaneous | 95.7 | 99.6 | 106.7 | 166.1 | 157.3 | 163.7 | 166.5 | 263.6 |
| Quarrying and nonmetallic mining | 84.5 | 84.1 | 82.8 | 98.2 | 158.0 | 150.0 | 144.9 | 166.3 |
| Crude-petroleum production [1] | 82.5 | 82.0 | 81.6 | 81.7 | 127.9 | 129.5 | 125.7 | 111.9 |
| Public utilities: | | | | | | | | |
| Telephone and telegraph | [2] | [2] | [2] | [2] | [2] | [2] | [2] | [2] |
| Electric light and power | 82.8 | 83.1 | 83.5 | 86.4 | 112.9 | 112.9 | 112.5 | 106.5 |
| Street railways and busses | 119.2 | 119.2 | 119.6 | 117.5 | 168.9 | 164.9 | 164.9 | 153.8 |
| Wholesale trade | 94.4 | 95.1 | 95.4 | 95.1 | 133.4 | 134.0 | 133.4 | 124.3 |
| Retail trade | 96.9 | 97.7 | 96.9 | 98.5 | 124.2 | 124.3 | 122.8 | 117.1 |
| Food | 107.3 | 106.9 | 107.8 | 105.6 | 134.2 | 133.6 | 133.7 | 125.8 |
| General merchandise [3] | 108.5 | 111.2 | 108.6 | 112.5 | 132.4 | 135.2 | 131.7 | 129.7 |
| Apparel [3] | 110.4 | 111.1 | 106.4 | 110.3 | 144.8 | 144.0 | 136.5 | 128.9 |
| Furniture and housefurnishings [3] | 63.2 | 62.8 | 63.3 | 67.2 | 86.3 | 85.8 | 84.8 | 85.0 |
| Automotive | 64.8 | 65.3 | 65.4 | 62.5 | 94.4 | 93.9 | 92.7 | 84.1 |
| Lumber and building materials | 90.2 | 89.1 | 89.3 | 91.5 | 127.9 | 124.2 | 124.2 | 119.7 |
| Hotels (year-round) [4] | 109.0 | 109.2 | 109.2 | 105.8 | 155.3 | 154.5 | 153.6 | 134.5 |
| Power laundries | 109.9 | 109.5 | 110.3 | 118.4 | 160.6 | 155.7 | 155.2 | 153.8 |
| Cleaning and dyeing | 124.7 | 120.7 | 117.3 | 126.5 | 193.8 | 179.9 | 173.7 | 177.8 |
| Class I steam railroads [5] | 144.3 | 143.1 | 141.7 | 136.7 | [6] | [6] | [6] | [6] |
| Water transportation [7] | 233.5 | 226.1 | 211.7 | 131.8 | 552.6 | 524.6 | 490.5 | 307.7 |

[1] Does not include well drilling or rig building.

[2] Data are not available because of the merger of Western Union and Postal Telegraph.

[3] Revisions have been made as follows in indexes previously published:

*Retail trade, general merchandise group.*—Employment index, January to 110.4; February to 106.8; pay-roll index; January to 132.1, February to 128.3.

*Apparel group.*—Employment index January to 105.7; February to 102.6; pay-roll index, January to 134.9, February to 130.4.

*Furniture group.*—Employment index, February to 64.0; pay-roll index, January to 84.9, February to 85.0.

[4] Cash payments only; additional value of board, room, and tips not included.

[5] Source: Interstate Commerce Commission.

[6] Not available.

[7] Based on estimates prepared by the U. S. Maritime Commission covering employment on steam and motor merchant vessels of 1,000 gross tons or over in deep-sea trade only.

## AVERAGE EARNINGS AND HOURS

Average weekly earnings and hours and average hourly earnings for February, March, and April 1944, where available, are given in table 6 for both manufacturing and nonmanufacturing industries. The average weekly earnings for individual industries are computed by dividing the weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As not all reporting establishments supply information on man-hours, the average hours worked per week and average hourly earnings shown in that table are necessarily based on data furnished by a slightly smaller number of reporting firms. Because of variation in the size and composition of the reporting sample, the average hours per week, average hourly earnings, and average weekly earnings shown may not be strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movement of earnings and hours over the period shown. The average weekly hours and hourly earnings for the manufacturing groups are weighted arithmetic means of the averages for the individual industries, estimated employment being used as weights for weekly hours and estimated aggregate hours as weights for hourly earnings. The average weekly earnings for these groups are computed by multiplying the average weekly hours by the corresponding average hourly earnings.

TABLE 6.—*Hours and Earnings in Manufacturing and Nonmanufacturing Industries*

MANUFACTURING

| Industry group or industry | Average weekly earnings [1] | | | Average weekly hours [1] | | | Average hourly earnings [1] | | |
|---|---|---|---|---|---|---|---|---|---|
| | May 1944 | Apr. 1944 | Mar. 1944 | May 1944 | Apr. 1944 | Mar. 1944 | May 1944 | Apr. 1944 | Mar. 1944 |
| | | | | | | | *Cents* | *Cents* | *Cents* |
| All manufacturing | $46.13 | $45.56 | $45.64 | 45.4 | 45.0 | 45.3 | 101.7 | 101.3 | 100.6 |
| Durable goods | 52.05 | 51.68 | 51.54 | 46.8 | 46.6 | 46.7 | 111.3 | 111.0 | 110.3 |
| Nondurable goods | 37.04 | 36.17 | 36.56 | 43.2 | 42.5 | 43.2 | 85.8 | 85.0 | 84.6 |
| *Durable goods* | | | | | | | | | |
| Iron and steel and their products | 50.41 | 50.07 | 50.18 | 46.8 | 46.5 | 46.9 | 107.7 | 107.7 | 107.0 |
| Blast furnaces, steel works, and rolling mills | 53.43 | 53.12 | 52.74 | 46.1 | 45.9 | 46.0 | 116.0 | 115.8 | 114.8 |
| Gray-iron and semisteel castings | 51.30 | 50.22 | 50.64 | 47.9 | 47.2 | 47.8 | 107.4 | 106.6 | 106.3 |
| Malleable-iron castings | 50.24 | 48.70 | 50.47 | 48.0 | 47.1 | 48.3 | 104.7 | 103.6 | 104.4 |
| Steel castings | 51.36 | 50.59 | 51.18 | 46.4 | 45.7 | 46.7 | 110.6 | 110.7 | 109.6 |
| Cast-iron pipe and fittings | 40.88 | 40.63 | 39.76 | 47.0 | 46.7 | 45.8 | 87.5 | 86.9 | 86.8 |
| Tin cans and other tinware | 38.99 | 39.04 | 38.98 | 44.4 | 44.2 | 44.5 | 87.8 | 88.3 | 87.6 |
| Wirework | 49.83 | 49.50 | 49.66 | 47.5 | 47.4 | 47.9 | 104.9 | 104.5 | 103.8 |
| Cutlery and edge tools | 44.06 | 44.05 | 42.90 | 46.6 | 46.9 | 46.4 | 94.5 | 93.9 | 92.4 |
| Tools (except edge tools, machine tools, files, and saws) | 45.43 | 46.11 | 45.86 | 47.3 | 47.6 | 47.8 | 96.2 | 96.9 | 96.1 |
| Hardware | 44.85 | 44.99 | 45.04 | 47.2 | 47.3 | 47.8 | 95.2 | 95.1 | 94.2 |
| Plumbers' supplies | 46.95 | 46.82 | 47.33 | 46.7 | 47.0 | 47.7 | 101.8 | 100.8 | 100.1 |
| Stoves, oil burners, and heating equipment, not elsewhere classified | 47.08 | 46.66 | 47.43 | 46.8 | 46.4 | 47.3 | 100.2 | 100.6 | 100.2 |
| Steam and hot-water heating apparatus and steam fittings | 48.73 | 48.28 | 48.45 | 48.2 | 47.8 | 48.1 | 101.1 | 101.1 | 100.8 |
| Stamped and enameled ware and galvanizing | 45.63 | 45.22 | 46.22 | 45.3 | 45.0 | 46.1 | 100.7 | 100.4 | 100.3 |
| Fabricated structural and ornamental metalwork [2] | 56.95 | 54.86 | 55.88 | 49.9 | 48.7 | 49.6 | 113.5 | 112.3 | 112.7 |
| Metal doors, sash, frames, molding, and trim | 50.34 | 51.74 | 49.66 | 47.8 | 48.4 | 47.5 | 105.9 | 106.9 | 104.6 |
| Bolts, nuts, washers, and rivets | 49.42 | 48.37 | 49.87 | 48.1 | 47.4 | 48.5 | 102.7 | 102.1 | 102.9 |
| Forgings, iron and steel | 58.20 | 58.33 | 59.87 | 47.5 | 47.5 | 48.5 | 122.7 | 122.9 | 123.6 |
| Screw-machine products and wood screws | 49.83 | 49.26 | 49.60 | 48.6 | 48.4 | 48.8 | 102.5 | 101.9 | 101.6 |
| Steel barrels, keys, and drums | 42.86 | 42.05 | 43.47 | 43.7 | 42.8 | 44.4 | 98.1 | 98.2 | 97.9 |
| Firearms | 59.88 | 61.72 | 60.99 | 47.7 | 47.6 | 47.5 | 125.6 | 129.6 | 128.3 |
| Electrical machinery | 47.30 | 46.87 | 47.18 | 46.3 | 46.2 | 46.7 | 102.1 | 101.5 | 101.0 |
| Electrical equipment | 49.97 | 49.45 | 49.86 | 46.8 | 46.7 | 47.2 | 106.8 | 106.0 | 105.7 |
| Radios and phonographs | 41.03 | 40.49 | 41.02 | 45.7 | 45.5 | 46.2 | 89.1 | 89.1 | 88.8 |
| Communication equipment | 44.43 | 44.03 | 43.72 | 45.2 | 45.1 | 45.3 | 97.6 | 96.8 | 95.8 |
| Machinery, except electrical | 54.50 | 54.40 | 54.54 | 48.8 | 48.8 | 49.1 | 111.7 | 111.5 | 111.0 |
| Machinery and machine-shop products | 53.17 | 52.53 | 53.28 | 48.4 | 48.1 | 48.7 | 110.0 | 109.5 | 109.2 |
| Engines and turbines | 60.48 | 59.30 | 60.08 | 49.8 | 49.3 | 49.7 | 122.1 | 120.6 | 121.3 |
| Tractors | 52.67 | 52.54 | 52.95 | 46.7 | 46.7 | 47.2 | 112.7 | 112.5 | 112.3 |
| Agricultural machinery, excluding tractors | 54.13 | 53.74 | 52.89 | 48.4 | 48.1 | 47.7 | 111.9 | 111.8 | 110.9 |
| Machine tools | 56.99 | 56.54 | 56.97 | 50.8 | 50.7 | 51.0 | 112.1 | 111.4 | 111.6 |
| Machine-tool accessories | 58.59 | 58.78 | 59.17 | 49.6 | 49.9 | 50.4 | 118.2 | 118.0 | 117.5 |
| Textile machinery | 47.08 | 47.02 | 47.34 | 48.6 | 49.0 | 49.4 | 97.0 | 96.0 | 95.8 |
| Typewriters | 48.87 | 48.25 | 48.65 | 49.3 | 48.9 | 48.9 | 99.1 | 98.6 | 99.4 |
| Cash registers, adding and calculating machines | 59.45 | 59.63 | 60.21 | 49.5 | 49.4 | 49.9 | 121.0 | 121.4 | 121.3 |
| Washing machines, wringers, and driers, domestic | 47.28 | 46.46 | 46.61 | 45.9 | 45.8 | 46.7 | 102.9 | 101.3 | 99.8 |
| Sewing machines, domestic and industrial | 58.59 | 58.19 | 58.63 | 52.8 | 52.3 | 52.9 | 111.7 | 111.9 | 111.6 |
| Refrigerators and refrigeration equipment | 51.00 | 50.85 | 51.04 | 47.0 | 46.7 | 47.0 | 108.7 | 108.8 | 108.6 |
| Transportation equipment, except automobiles | 60.15 | 59.40 | 58.73 | 47.5 | 47.1 | 47.0 | 126.6 | 126.1 | 125.1 |
| Locomotives | 64.18 | 64.71 | 66.45 | 49.0 | 49.5 | 50.7 | 131.0 | 130.8 | 131.0 |
| Cars, electric- and steam-railroad | 53.44 | 51.56 | 53.36 | 46.6 | 45.7 | 46.9 | 114.7 | 112.9 | 113.8 |
| Aircraft and parts, excluding aircraft engines | 54.07 | 53.55 | 53.70 | 46.8 | 46.7 | 47.0 | 115.5 | 114.8 | 114.3 |
| Aircraft engines | 61.62 | 62.53 | 61.93 | 47.4 | 47.7 | 47.6 | 130.1 | 131.0 | 130.2 |
| Shipbuilding and boatbuilding | 64.11 | 62.89 | 61.46 | 48.0 | 47.3 | 46.6 | 133.6 | 133.0 | 131.9 |
| Motorcycles, bicycles, and parts | 50.93 | 48.22 | 46.79 | 47.6 | 46.8 | 45.7 | 106.9 | 102.9 | 102.4 |
| Automobiles | 58.45 | 58.67 | 58.37 | 46.2 | 46.4 | 46.3 | 126.6 | 126.4 | 126.1 |
| Nonferrous metals and their products | 48.85 | 48.73 | 48.96 | 46.6 | 46.6 | 46.9 | 104.8 | 104.5 | 104.4 |
| Smelting and refining, primary, of nonferrous metals | 49.16 | 49.41 | 48.24 | 46.4 | 46.6 | 45.9 | 106.0 | 106.1 | 105.1 |
| Alloying and rolling and drawing of nonferrous metals, except aluminum | 53.08 | 52.88 | 53.84 | 47.6 | 47.7 | 48.4 | 111.6 | 111.0 | 111.2 |
| Clocks and watches | 43.40 | 42.75 | 42.69 | 46.8 | 46.7 | 46.7 | 92.8 | 91.7 | 91.4 |
| Jewelry (precious metals) and jewelers' findings | 42.52 | 42.24 | 41.85 | 44.7 | 44.9 | 45.0 | 93.5 | 92.9 | 92.4 |
| Silverware and plated ware | 47.63 | 46.86 | 46.95 | 46.9 | 46.3 | 46.3 | 101.7 | 101.4 | 101.3 |
| Lighting equipment | 47.35 | 46.73 | 47.33 | 45.8 | 45.5 | 45.8 | 103.5 | 102.8 | 103.3 |
| Aluminum manufactures | 48.73 | 48.61 | 48.87 | 46.0 | 45.9 | 46.3 | 105.9 | 105.9 | 105.6 |

See footnotes at end of table.

TABLE 6.—*Hours and Earnings in Manufacturing and Nonmanufacturing Industries*—Continued

MANUFACTURING—Continued

| Industry group or industry | Average weekly earnings [1] | | | Average weekly hours [1] | | | Average hourly earnings [1] | | |
|---|---|---|---|---|---|---|---|---|---|
| | May 1944 | Apr. 1944 | Mar. 1944 | May 1944 | Apr. 1944 | Mar. 1944 | May 1944 | Apr. 1944 | Mar. 1944 |
| *Durable goods*—Continued | | | | | | | *Cents* | *Cents* | *Cents* |
| Lumber and timber basic products | $34.55 | $34.05 | $33.30 | 43.4 | 43.2 | 43.2 | 79.6 | 78.8 | 77.1 |
| Sawmills and logging camps | 33.66 | 33.14 | 32.26 | 42.9 | 42.7 | 42.6 | 78.6 | 77.5 | 75.7 |
| Planing and plywood mills | 37.37 | 36.86 | 36.42 | 45.2 | 44.8 | 44.9 | 82.8 | 82.5 | 81.2 |
| Furniture and finished lumber products | 35.70 | 34.92 | 35.47 | 44.4 | 43.7 | 44.5 | 80.5 | 79.9 | 79.7 |
| Furniture | 36.25 | 35.46 | 36.29 | 44.3 | 43.6 | 44.4 | 82.3 | 81.7 | 81.8 |
| Caskets and other morticians' goods | 39.01 | 38.51 | 38.46 | 45.5 | 45.2 | 45.6 | 85.7 | 85.4 | 84.6 |
| Wood preserving | 32.66 | 32.02 | 31.60 | 43.2 | 42.2 | 42.0 | 75.2 | 75.9 | 75.2 |
| Stone, clay, and glass products | 38.95 | 38.45 | 38.46 | 43.7 | 43.2 | 43.6 | 89.2 | 89.1 | 88.2 |
| Glass and glassware | 39.53 | 39.18 | 39.65 | 42.4 | 41.9 | 42.6 | 93.5 | 93.7 | 93.2 |
| Glass products made from purchased glass | 34.34 | 33.64 | 33.47 | 44.2 | 44.1 | 44.0 | 77.6 | 77.0 | 76.9 |
| Cement | 40.98 | 39.99 | 38.73 | 44.7 | 43.9 | 43.3 | 91.6 | 91.0 | 89.4 |
| Brick, tile, and terra cotta | 32.61 | 31.70 | 32.06 | 41.4 | 40.5 | 41.4 | 78.0 | 77.9 | 77.0 |
| Pottery and related products | 35.82 | 35.72 | 35.30 | 41.5 | 41.8 | 41.6 | 86.8 | 86.5 | 85.6 |
| Gypsum | 43.59 | 43.93 | 43.31 | 48.1 | 48.1 | 47.5 | 91.0 | 91.3 | 91.2 |
| Lime | 38.86 | 38.11 | 36.72 | 49.8 | 48.3 | 48.2 | 78.1 | 78.3 | 76.6 |
| Marble, granite, slate, and other products | 39.63 | 38.92 | 37.82 | 44.7 | 43.3 | 43.0 | 90.5 | 89.9 | 87.4 |
| Abrasives | 47.33 | 46.22 | 45.98 | 47.6 | 46.5 | 47.1 | 99.4 | 99.4 | 97.6 |
| Asbestos products | 46.92 | 46.15 | 47.10 | 48.0 | 47.6 | 48.4 | 97.7 | 97.0 | 97.3 |
| *Nondurable goods* | | | | | | | | | |
| Textile-mill products and other fiber manufactures | 29.52 | 28.85 | 28.88 | 41.6 | 41.2 | 41.9 | 71.0 | 70.1 | 69.0 |
| Cotton manufactures, except smallwares | 26.34 | 25.75 | 25.26 | 41.5 | 41.3 | 41.8 | 63.4 | 62.4 | 60.5 |
| Cotton smallwares | 33.40 | 31.96 | 32.75 | 43.7 | 42.6 | 43.3 | 76.5 | 75.1 | 75.6 |
| Silk and rayon goods | 29.13 | 28.27 | 28.53 | 41.8 | 41.1 | 42.4 | 69.7 | 68.8 | 67.2 |
| Woolen and worsted manufactures, except dyeing and finishing | 35.50 | 34.79 | 35.32 | 42.2 | 41.6 | 42.4 | 84.2 | 83.7 | 83.3 |
| Hosiery | 28.93 | 28.08 | 28.90 | 38.6 | 37.8 | 38.9 | 75.1 | 74.1 | 74.4 |
| Knitted cloth | 31.51 | 31.31 | 31.37 | 43.1 | 42.9 | 43.5 | 72.4 | 72.3 | 72.0 |
| Knitted outerwear and knitted gloves | 29.71 | 29.00 | 29.14 | 39.8 | 39.5 | 40.0 | 73.6 | 72.4 | 71.9 |
| Knitted underwear | 26.41 | 26.18 | 26.21 | 40.5 | 40.1 | 41.1 | 64.5 | 64.5 | 63.1 |
| Dyeing and finishing textiles, including woolen and worsted | 33.85 | 33.47 | 33.79 | 44.7 | 44.5 | 45.0 | 75.6 | 75.1 | 74.9 |
| Carpets and rugs, wool | 38.52 | 38.11 | 38.40 | 42.9 | 42.6 | 43.5 | 90.1 | 89.6 | 88.6 |
| Hats, fur-felt | 42.71 | 41.64 | 42.44 | 41.4 | 41.2 | 41.9 | 103.2 | 101.4 | 101.3 |
| Jute goods, except felts | 33.65 | 32.50 | 33.65 | 44.5 | 42.8 | 44.9 | 75.6 | 76.0 | 75.0 |
| Cordage and twine | 32.36 | 32.14 | 31.27 | 44.9 | 45.0 | 44.6 | 71.9 | 71.3 | 70.0 |
| Apparel and other finished textile products | 29.47 | 28.71 | 30.72 | 38.2 | 37.3 | 38.9 | 77.2 | 77.0 | 78.9 |
| Men's clothing, not elsewhere classified | 32.19 | 30.44 | 31.77 | 39.3 | 38.0 | 39.3 | 81.3 | 79.9 | 80.2 |
| Shirts, collars, and nightwear | 24.42 | 23.45 | 24.33 | 37.5 | 36.7 | 38.0 | 65.1 | 64.1 | 62.9 |
| Underwear and neckwear, men's | 26.23 | 25.50 | 26.39 | 37.7 | 37.0 | 38.0 | 69.6 | 68.9 | 69.4 |
| Work shirts | 19.93 | 19.43 | 19.78 | 37.2 | 36.9 | 37.8 | 52.7 | 51.6 | 51.8 |
| Women's clothing, not elsewhere classified | 34.39 | 34.16 | 37.83 | 36.6 | 36.1 | 38.1 | 91.7 | 92.7 | 96.9 |
| Corsets and allied garments | 29.84 | 29.28 | 29.71 | 41.3 | 40.8 | 41.4 | 72.4 | 71.9 | 71.9 |
| Millinery | 32.37 | 33.30 | 40.09 | 30.7 | 31.5 | 35.1 | 88.4 | 88.3 | 94.7 |
| Handkerchiefs | 24.00 | 22.30 | 23.46 | 38.4 | 36.0 | 38.6 | 62.4 | 62.0 | 60.8 |
| Curtains, draperies, and bedspreads | 25.32 | 23.96 | 24.11 | 39.2 | 37.4 | 37.5 | 63.8 | 63.8 | 64.0 |
| Housefurnishings, other than curtains, etc | 31.17 | 29.65 | 30.40 | 41.3 | 40.1 | 41.4 | 75.4 | 73.9 | 73.7 |
| Textile bags | 28.01 | 27.47 | 27.80 | 41.3 | 40.7 | 41.7 | 67.6 | 67.5 | 66.7 |
| Leather and leather products | 33.02 | 32.48 | 32.36 | 41.2 | 41.1 | 41.4 | 80.1 | 79.0 | 78.2 |
| Leather | 42.63 | 42.38 | 41.37 | 45.4 | 45.4 | 45.1 | 94.1 | 93.7 | 92.0 |
| Boot and shoe cut stock and findings | 33.36 | 32.89 | 33.05 | 43.0 | 43.2 | 42.9 | 78.6 | 78.4 | 78.3 |
| Boots and shoes | 30.98 | 30.39 | 30.43 | 40.3 | 40.1 | 40.5 | 76.7 | 75.4 | 74.7 |
| Leather gloves and mittens | 29.37 | 29.14 | 29.55 | 38.4 | 38.6 | 39.5 | 77.0 | 75.9 | 75.3 |
| Trunks and suitcases | 34.85 | 32.61 | 33.90 | 42.5 | 40.7 | 41.8 | 81.1 | 79.7 | 80.3 |
| Food | 39.08 | 37.88 | 38.04 | 45.8 | 44.8 | 45.3 | 85.4 | 84.5 | 83.9 |
| Slaughtering and meat packing | 46.41 | 43.74 | 43.56 | 49.9 | 47.8 | 48.4 | 93.4 | 91.8 | 90.3 |
| Butter | 33.64 | 33.37 | 33.09 | 47.1 | 47.2 | 46.9 | 70.2 | 70.9 | 69.7 |
| Condensed and evaporated milk | 36.94 | 36.24 | 35.44 | 50.3 | 50.0 | 49.1 | 73.4 | 72.5 | 72.2 |
| Ice cream | 37.83 | 37.66 | 37.49 | 45.7 | 46.1 | 46.0 | 78.8 | 78.6 | 78.3 |
| Flour | 40.61 | 40.41 | 39.70 | 48.7 | 48.6 | 48.5 | 83.2 | 83.2 | 81.9 |
| Cereal preparations | 44.29 | 42.59 | 44.02 | 46.4 | 45.0 | 46.3 | 95.5 | 94.6 | 95.1 |
| Baking | 38.01 | 37.04 | 37.42 | 45.3 | 44.6 | 45.2 | 84.2 | 83.1 | 82.9 |
| Sugar refining, cane | 38.19 | 37.21 | 38.59 | 45.2 | 45.1 | 46.4 | 84.3 | 82.5 | 83.1 |
| Sugar, beet | 35.93 | 37.58 | 37.17 | 37.6 | 37.8 | 38.4 | 95.6 | 99.4 | 96.8 |
| Confectionery | 29.70 | 29.11 | 29.83 | 41.6 | 41.0 | 42.1 | 71.5 | 71.3 | 71.2 |
| Beverages, nonalcoholic | 34.41 | 33.46 | 33.13 | 43.5 | 43.0 | 42.8 | 79.0 | 78.1 | 77.5 |
| Malt liquors | 51.27 | 50.45 | 49.24 | 46.5 | 45.9 | 45.1 | 110.8 | 110.0 | 109.4 |
| Canning and preserving | 30.96 | 30.64 | 30.56 | 41.2 | 39.9 | 40.7 | 76.5 | 77.8 | 75.9 |

See footnotes at end of table.

TABLE 6.—*Hours and Earnings in Manufacturing and Nonmanufacturing Industries*—Continued

MANUFACTURING—Continued

| Industry group or industry | Average weekly earnings [1] | | | Average weekly hours [1] | | | Average hourly earnings [1] | | |
|---|---|---|---|---|---|---|---|---|---|
| | May 1944 | Apr. 1944 | Mar. 1944 | May 1944 | Apr. 1944 | Mar. 1944 | May 1944 | Apr. 1944 | Mar. 1944 |
| *Nondurable goods*—Continued | | | | | | | *Cents* | *Cents* | *Cents* |
| Tobacco manufactures | $29.34 | $27.00 | $27.75 | 42.0 | 39.0 | 40.9 | 69.8 | 69.1 | 67.9 |
| Cigarettes | 31.97 | 28.57 | 28.97 | 42.3 | 37.8 | 39.8 | 75.5 | 75.6 | 72.9 |
| Cigars | 27.68 | 26.01 | 27.28 | 42.3 | 40.4 | 42.4 | 65.5 | 64.4 | 64.5 |
| Tobacco (chewing and smoking) and snuff | 25.48 | 24.78 | 24.76 | 39.0 | 37.8 | 38.3 | 65.3 | 65.6 | 64.6 |
| Paper and allied products | 38.75 | 38.09 | 38.20 | 46.0 | 45.5 | 45.8 | 84.2 | 83.7 | 83.4 |
| Paper and pulp | 42.49 | 41.59 | 41.50 | 48.3 | 47.6 | 47.6 | 87.9 | 87.5 | 87.1 |
| Envelopes | 36.54 | 35.77 | 36.72 | 45.1 | 44.5 | 45.4 | 81.0 | 80.4 | 80.9 |
| Paper bags | 32.96 | 33.21 | 32.95 | 43.5 | 44.1 | 44.2 | 76.1 | 75.1 | 74.7 |
| Paper boxes | 34.26 | 33.72 | 34.18 | 43.4 | 43.1 | 43.8 | 79.2 | 78.4 | 78.2 |
| Printing, publishing, and allied industries | 43.84 | 42.93 | 42.82 | 40.9 | 40.6 | 40.8 | 107.2 | 105.9 | 104.9 |
| Newspaper and periodicals | 48.29 | 47.07 | 47.06 | 38.1 | 37.7 | 37.9 | 124.8 | 123.2 | 122.6 |
| Printing, book, and job | 42.09 | 41.35 | 41.18 | 42.1 | 41.9 | 42.0 | 99.4 | 98.3 | 97.3 |
| Lithographing | 45.84 | 44.33 | 45.11 | 44.4 | 43.0 | 44.4 | 103.2 | 103.0 | 101.6 |
| Chemicals and allied products | 43.95 | 43.01 | 42.99 | 46.0 | 45.6 | 45.8 | 95.5 | 94.4 | 93.8 |
| Paints, varnishes, and colors | 46.12 | 45.19 | 45.16 | 47.8 | 47.3 | 47.4 | 96.0 | 95.7 | 95.6 |
| Drugs, medicines, and insecticides | 34.76 | 33.72 | 34.72 | 43.3 | 42.5 | 43.8 | 80.7 | 79.5 | 79.6 |
| Soap | 46.91 | 47.02 | 46.81 | 47.5 | 47.6 | 47.4 | 98.7 | 98.8 | 98.8 |
| Rayon and allied products | 39.45 | 38.59 | 38.56 | 43.4 | 42.6 | 42.8 | 90.9 | 90.5 | 90.0 |
| Chemicals, not elsewhere classified | 51.42 | 51.20 | 51.07 | 46.7 | 46.7 | 46.7 | 110.1 | 109.7 | 109.4 |
| Explosives and safety fuses [3] | 47.66 | 46.66 | 46.39 | 46.7 | 46.2 | 45.9 | 102.2 | 101.0 | 101.1 |
| Ammunition, small-arms | 44.98 | 45.19 | 44.03 | 46.3 | 46.7 | 45.9 | 97.1 | 96.8 | 96.0 |
| Cottonseed oil | 26.29 | 25.94 | 25.83 | 49.9 | 49.9 | 50.1 | 52.6 | 52.0 | 51.5 |
| Fertilizers | 30.60 | 27.71 | 28.31 | 45.5 | 43.4 | 45.0 | 67.3 | 63.8 | 62.9 |
| Products of petroleum and coal | 55.24 | 54.40 | 54.24 | 47.0 | 46.3 | 46.6 | 117.6 | 117.5 | 116.3 |
| Petroleum refining | 58.40 | 57.83 | 57.62 | 47.0 | 46.3 | 46.7 | 124.4 | 124.9 | 123.5 |
| Coke and byproducts | 47.58 | 46.53 | 46.72 | 46.2 | 45.6 | 46.0 | 102.8 | 101.9 | 101.3 |
| Roofing materials | 45.74 | 44.51 | 44.46 | 48.9 | 48.1 | 48.0 | 93.5 | 92.6 | 92.7 |
| Rubber products | 49.08 | 48.12 | 49.53 | 45.1 | 44.7 | 45.6 | 108.9 | 107.5 | 108.6 |
| Rubber tires and inner tubes | 57.16 | 55.63 | 58.38 | 45.5 | 45.2 | 46.6 | 125.8 | 123.4 | 125.6 |
| Rubber boots and shoes | 40.02 | 40.33 | 39.86 | 44.1 | 44.5 | 44.5 | 90.7 | 90.5 | 89.6 |
| Rubber goods, other | 41.24 | 40.72 | 41.09 | 44.8 | 44.3 | 44.7 | 92.8 | 92.2 | 92.1 |
| Miscellaneous industries | 43.90 | 43.43 | 43.61 | 46.2 | 45.9 | 46.3 | 95.1 | 94.7 | 94.2 |
| Professional and scientific instruments and fire-control equipment | 55.36 | 54.93 | 55.22 | 50.5 | 50.3 | 50.6 | 110.0 | 109.5 | 109.4 |
| Photographic apparatus | 48.18 | 47.49 | 49.17 | 45.8 | 45.7 | 46.9 | 105.3 | 104.7 | 104.9 |
| Pianos, organs, and parts | 46.07 | 46.25 | 46.41 | 46.0 | 46.3 | 46.4 | 100.5 | 100.4 | 100.4 |

See footnotes at end of table.

TABLE 6.—*Hours and Earnings in Manufacturing and Nonmanufacturing Industries*—Continued

NONMANUFACTURING

| Industry group or industry | Average weekly earnings [1] | | | Average weekly hours [1] | | | Average hourly earnings [1] | | |
|---|---|---|---|---|---|---|---|---|---|
| | May 1944 | Apr. 1944 | Mar. 1944 | May 1944 | Apr. 1944 | Mar. 1944 | May 1944 | Apr. 1944 | Mar. 1944 |
| Coal mining: | | | | | | | *Cents* | *Cents* | *Cents* |
| Anthracite | $48.54 | $44.36 | $48.67 | 41.9 | 38.2 | 41.7 | 115.9 | 116.6 | 116.2 |
| Bituminous | 51.67 | 50.62 | 52.23 | 43.8 | 42.8 | 44.6 | 117.7 | 118.4 | 117.4 |
| Metal mining | 44.59 | 44.62 | 44.57 | 44.4 | 44.0 | 44.5 | 100.1 | 101.2 | 99.9 |
| Quarrying and nonmetallic mining | 40.17 | 38.64 | 37.78 | 47.4 | 45.6 | 45.4 | 84.8 | 84.8 | 83.3 |
| Crude-petroleum production | 52.07 | 53.00 | 51.74 | 45.5 | 44.9 | 45.5 | 113.0 | 116.8 | 112.1 |
| Public utilities: | | | | | | | | | |
| Telephone and telegraph | [3] | [3] | [3] | [3] | [3] | [3] | [3] | [3] | [3] |
| Electric light and power | 47.77 | 47.53 | 47.09 | 43.4 | 42.3 | 43.0 | 110.3 | 111.0 | 109.2 |
| Street railways and busses | 47.78 | 46.46 | 46.36 | 51.0 | 49.4 | 49.8 | 92.8 | 92.8 | 92.2 |
| Trade: | | | | | | | | | |
| Wholesale | 42.00 | 41.83 | 41.51 | 42.8 | 42.5 | 42.8 | 97.9 | 98.4 | 98.6 |
| Retail [2] | 26.29 | 26.06 | 25.92 | 41.3 | 41.4 | 41.7 | 69.7 | 69.0 | 68.4 |
| Food [2] | 29.63 | 29.60 | 29.37 | 39.8 | 40.1 | 40.0 | 70.8 | 70.3 | 69.7 |
| General merchandise [2] | 21.57 | 21.51 | 21.44 | 37.4 | 37.6 | 37.6 | 58.4 | 57.5 | 57.0 |
| Apparel [2] | 27.79 | 27.61 | 27.45 | 37.4 | 37.2 | 37.1 | 79.9 | 78.9 | 77.4 |
| Furniture and housefurnishings [2] | 37.55 | 37.15 | 36.72 | 43.5 | 43.4 | 44.0 | 85.3 | 84.3 | 83.9 |
| Automotive [2] | 41.32 | 40.78 | 40.16 | 46.3 | 46.4 | 46.7 | 91.4 | 89.5 | 87.7 |
| Lumber and building materials | 37.23 | 36.61 | 36.54 | 44.5 | 43.7 | 43.7 | 89.2 | 88.8 | 87.9 |
| Hotels (year-round) [4] | 22.46 | 22.26 | 22.18 | 44.5 | 44.8 | 44.8 | 49.8 | 49.1 | 48.8 |
| Power laundries | 27.04 | 26.29 | 26.11 | 43.8 | 43.7 | 43.7 | 61.9 | 60.6 | 60.1 |
| Cleaning and dyeing | 31.42 | 30.30 | 30.11 | 44.3 | 43.5 | 44.0 | 73.1 | 71.7 | 70.8 |
| Brokerage | 52.29 | 53.19 | 53.46 | (5) | (5) | (5) | (5) | (5) | (5) |
| Insurance | 44.78 | 44.24 | 45.19 | (5) | (5) | (5) | (5) | (5) | (5) |
| Private building construction | 52.95 | 50.18 | 49.85 | 40.4 | 38.7 | 38.5 | 131.0 | 129.7 | 129.6 |

[1] These figures are based on reports from cooperating establishments covering both full- and part-time employees who worked during any part of one pay period ending nearest the 15th of the month. As not all reporting firms furnish man-hour data, average hours and average hourly earnings for individual industries are based on a smaller sample than are weekly earnings. Data for the current and immediately preceding months are subject to revision.

[2] Revisions have been made as follows in the data published for earlier months:

*Fabricated structural and ornamental metalwork.*—January and February 1944 average weekly earnings to $54.09 and $54.57; average weekly hours to 48.6 and 49.0.

*Explosives and safety fuses.*—January and February 1944 average weekly hours to 46.1 and 46.1.

*Retail trade total.*—Average weekly earnings January 1944 to $25.66.

*Food group.*—Average hourly earnings, January to 69.8 cents; February to 70.0 cents.

*Apparel group.*—Average hourly earnings, January to 74.3 cents; February to 73.1 cents.

*Furniture group.*—Average hours per week, January to 43.4; February to 43.7; average hourly earnings, January to 83.4 cents.

Yearly averages for 1943 have been revised as follows:

*Retail trade total.*—Average hours per week to 40.5; average hourly earnings to 67.0 cents; average hourly earnings—general merchandise group to 55.3 cents; apparel group, to 70.0 cents; furniture group to 80.9 cents; automotive group, average weekly hours to 47.3; average hourly earnings to 79.5 cents.

[3] Data are not available because of the merger of Western Union and Postal Telegraph.

[4] Cash payments only; additional value of board, room, and tips not included.

[5] Not available.

## Civilian Labor Force, June 1944

A SEASONAL upswing of 1,380,000 over the May level brought the civilian labor force to a total of 54,220,000 in June 1944, according to the Bureau of the Census Monthly Report on the Labor Force. Employment increased by 1,260,000 and unemployment by 120,000. The total of 1,000,000 unemployed in June was a record low for this time of the year.

Labor-market participation of students on school vacation largely accounted for the increase in the labor force between May and June. During the month interval, some 960,000 additional persons—610,000 females and 350,000 males—took seasonal employment on farms. Housewives, as well as teen-age boys and girls were an important source

of labor supply in agriculture. The increase in agricultural employment between May and June of this year was of approximately the same magnitude as that recorded between these months last year. The level of agricultural employment, however, remains about 260,000 below the level of a year ago.

A gain of 300,000 persons engaged in nonagricultural pursuits between May and June was somewhat smaller than the increase during the corresponding period in 1943, and the level of nonagricultural employment in June 1944 was 520,000 lower than in June 1943.

The number of women at work in June 1944—18,180,000—was a record high, surpassing the previous peak (July 1943) by 100,000 and topping the figure for June 1943 by 400,000. Employment of women in nonagricultural industry was about 500,000 greater than in June 1943, although the number in agricultural employment was 90,000 below that of last year. On the other hand, the number of men in civilian jobs was lower than the July 1943 level by 1,180,000—1,010,000 in nonagricultural industry and 170,000 in agriculture. During the year, however, the number of men in the armed services increased by 2,400,000.

*Civilian Labor Force in the United States, Classified by Employment Status and by Sex May and June 1940–44* [1]

[Source: U. S. Department of Commerce, Bureau of the Census]

| Item | Estimated number (in thousands) of persons 14 years of age and over [2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1944 | | 1943 | | 1942 | | 1941 | | 1940 | |
| | June | May | June | May | June | May | June | May | June | May |
| Total civilian labor force | 54,220 | 52,840 | 55,220 | 53,550 | 56,260 | 54,340 | 56,130 | 53,880 | 55,560 | 53,890 |
| Unemployment [3] | 1,000 | 880 | 1,220 | 920 | 2,550 | 2,310 | 5,520 | 5,120 | 7,720 | 7,490 |
| Employment | 53,220 | 51,960 | 54,000 | 52,630 | 53,710 | 52,030 | 50,610 | 48,760 | 47,840 | 46,400 |
| Nonagricultural | 43,660 | 43,360 | 44,180 | 43,720 | 43,480 | 42,980 | 40,510 | 39,550 | 36,950 | 36,480 |
| Agricultural | 9,560 | 8,600 | 9,820 | 8,910 | 10,230 | 9,050 | 10,100 | 9,210 | 10,890 | 9,920 |
| *Males* | | | | | | | | | | |
| Civilian labor force | 35,540 | 34,910 | 36,880 | 36,260 | 40,790 | 39,820 | 41,790 | 40,270 | 41,710 | 40,640 |
| Unemployment [3] | 500 | 420 | 660 | 530 | 1,610 | 1,460 | 3,800 | 3,700 | 5,450 | 5,550 |
| Employment | 35,040 | 34,490 | 36,220 | 35,730 | 39,180 | 38,360 | 37,990 | 36,570 | 36,260 | 35,090 |
| Nonagricultural | 27,600 | 27,400 | 28,610 | 28,520 | 31,070 | 30,740 | 29,480 | 28,610 | 27,090 | 26,220 |
| Agricultural | 7,440 | 7,090 | 7,610 | 7,210 | 8,110 | 7,620 | 8,510 | 7,960 | 9,170 | 8,870 |
| *Females* | | | | | | | | | | |
| Civilian labor force | 18,680 | 17,930 | 18,340 | 17,290 | 15,470 | 14,520 | 14,340 | 13,610 | 13,850 | 13,250 |
| Unemployment | 500 | 460 | 560 | 390 | 940 | 850 | 1,720 | 1,420 | 2,270 | 1,940 |
| Employment | 18,180 | 17,470 | 17,780 | 16,900 | 14,530 | 13,670 | 12,620 | 12,190 | 11,580 | 11,310 |
| Nonagricultural | 16,060 | 15,960 | 15,570 | 15,200 | 12,410 | 12,240 | 11,030 | 10,940 | 9,860 | 10,260 |
| Agricultural | 2,120 | 1,510 | 2,210 | 1,700 | 2,120 | 1,430 | 1,590 | 1,250 | 1,720 | 1,050 |

[1] Estimates for period prior to November 1943 revised April 24, 1944.
[2] All data exclude persons in institutions.
[3] Includes persons on public emergency projects prior to July 1943.

# *Recent Publications of Labor Interest*

## August 1944

### *Cooperative Movement*

*A survey of the cooperative movement in the American republics.* By Albert H. Berman. Washington 25, U. S. Office of the Coordinator of Inter-American Affairs, Research Division, 1944. 38 pp., bibliography; mimeographed.

Data presented in this survey of cooperatives in Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Uruguay, Venezuela, and the United States include information on types and development of cooperatives; statistics of membership, capitalization, etc., in some cases as late as 1943; and legislation of five countries. Names and addresses of organizations for the furthering of the cooperative movement in eight of the countries are listed.

*Labor and co-ops: The value of consumer cooperation to organized workers.* By James Myers. Chicago, Cooperative League of the U. S. A., 1943. 48 pp., charts, illus. 2d ed.

Shows the advantages to organized workers of a consumers' cooperative, how to organize such a cooperative, and the extent of unionists' participation in the cooperative movement in the United States, and gives a list of cooperatives which have "either been built by the initiative of wage earners or whose membership is 50 percent or over members of organized labor or wage-earner groups. These cooperatives include those built by white workers and a number by Negro workers."

*Purchasing farm supplies through Southern States Cooperative, Inc.* By John H. Lister and Alexander Swantz. Washington 25, U. S. Department of Agriculture, Farm Credit Administration, 1943. 150 pp., maps, charts, illus. (Circular No. C–128.)

Detailed study of one of the large regional wholesale cooperatives, which in 1941–42 had a business of $26,303,713, with 110 local cooperatives and 40,959 individuals, in petroleum products, tires, paints, and various farm supplies. The organizational structure of this wholesale, including as it does wholesale operations, retail service stores, autonomous local associations, manufacturing departments and subsidiaries, and individual members, is one of the most complicated in the cooperative movement.

*Credit unions among Negroes.* By Samuel A. Rosenberg. (In The Bridge, Madison, Wis., April 1944, pp. 76–79. 10 cents.)

Gives statistics for Negro credit unions (cooperative credit associations) in 1942, together with data on the various occupation and other groups having such organizations.

*A guide for a self-help exchange.* By Mrs. Henry Grattan Doyle. Washington, Washington Self-Help Exchange, Inc., 1943. 26 pp.; mimeographed.

Describes how a self-help exchange for unemployed persons is organized, the principles on which it should operate, and the various activities that can be engaged in, and suggests forms for articles of incorporation, membership application, and residence application (for use when the organization operates a lodging house). As the author was the director of one of the most successful self-help exchanges, the pamphlet is based on practical experience.

*Estudios cooperativos.* By Nicolás Repetto. Buenos Aires, Federación Argentina de Cooperativas de Consumo, 1943. 137 pp. 1 peso.

Collection of addresses, articles, and class lectures by a leader in the cooperative movement in Argentina. Subjects dealt with include recommended practices for the cooperative movement, use of capital, housing, etc.

EDITOR'S NOTE.—Correspondence regarding the publications to which reference is made in this list should be addressed to the respective publishing agencies mentioned. Where data on prices were readily available, they have been shown with the title entries.

## *Cost and Standards of Living*

*Cost of living for aged persons: Items, quantities, and prices of goods and services required by an aged couple and by an aged man living alone at the maintenance level in a northern urban area, 1938 and 1942.* By Florence A. Armstrong. Washington 25, U. S. Social Security Board, Bureau of Research and Statistics, 1943. 44 pp.; mimeographed. (Bureau memorandum No. 53.) Limited free distribution.

*Installment buying by city consumers in 1941.* By Reavis Cox. Washington 25, U. S. Bureau of Labor Statistics, 1944. 21 pp., charts. (Bull. No. 773.) 10 cents, Superintendent of Documents, Washington 25.

*Minimum-wage budgets for women—a guide to their preparation.* Washington 25, U. S. Department of Agriculture, 1944. 42 pp., bibliography. (Miscellaneous publication No. 549.)

*Substandard conditions of living: A study of the cost of the emergency sustenance budget in five textile manufacturing communities in January-February 1944.* New York, Textile Workers Union of America, CIO, Research Department, 1944. 94 pp.

The emergency budget of the U. S. Works Progress Administration, developed in 1935 as an administrative guide, was repriced by the research department of the Textile Workers Union of America as of January or February 1944 for New Bedford, Mass.; the Lewiston-Auburn region of Maine; West Warwick, R. I.; High Point, N. C.; and Henderson, N. C. The survey was carried on with the assistance of the Bureau of Labor Statistics.

*Costs of dental care for adults under specific clinical conditions.* By Dorothy Fahs Beck. New York, American College of Dentists, 1943. 306 pp., charts. $1.50.

Covers initial and maintenance care of 485 patients of Dental Health Service, a pay clinic in New York City. The study presents the first extensive comparison between dental fees and costs and a comprehensive discussion of the problem of dental service as a whole.

*Report on the cost of living of Indian workmen earning less than 50 shillings per week on the Island of Viti Levu, [Colony of Fiji], September-November 1943.* Suva, Labor and National Service Board, 1944. 19 pp. 1s.

A study of household budgets.

## *Economic and Social Problems*

*The C. E. D.—what is it and why?* By Robert A. Brady. (In Antioch Review, Yellow Springs, Ohio, March 1944, pp. 21–46. 75 cents.)

Critical study of the Committee for Economic Development (285 Madison Avenue, New York 17), a nonofficial organization set up in 1942, with a discussion of the significance of its program for industrial workers, farmers, consumers, and small businessmen.

*The future economic policy of the United States.* By William Adams Brown, Jr. Boston, World Peace Foundation, 1943. 101 pp., bibliography. (America looks ahead, No. 8.) 50 cents.

The writer discusses the contradictory aims implied by the demands for a "free enterprise system" and for social and economic security. He states that there is a reconciling principle, which he describes as embodying public intervention for maintaining the personal security of individuals but not the security of occupations. A guaranty of occupational security tends to freeze existing social and economic arrangements, whereas the security of individuals makes possible a dynamic and progressive society.

*State and local finance in the national economy.* By Alvin H. Hansen and Harvey S. Perloff. New York, W. W. Norton & Co., Inc., 1944. 310 pp., charts. $3.75.

State and local tax systems have serious defects, according to the authors, notably the fact that taxes fall largely, either directly or indirectly, on everyday items of consumption. They also say that State and local fiscal policies have tended to aggravate instead of prevent economic fluctuations, the view being expressed that the taxing, borrowing, and spending activities of governments should be designed to check expansion in boom periods and add to economic activities in periods of depression. Much of the volume is devoted to discussions of public measures for maintaining full employment and economic stability while at the same time raising the service standards of governmental units.

*The theory of economic progress.* By C. E. Ayres. Chapel Hill, University of North Carolina Press, 1944. 317 pp. $3.

The author describes war and poverty as the two major obstacles to progress, both of which he traces to the same underlying cause, namely, a lack of balance in the distribution of the product of modern technology. He believes that when the possibility of abundance becomes clear, this idea will sweep away the unnecessary complexities and "esoteric formulas" of economics and will bring about the actuality of abundance.

*The German war economy—XI.* By H. W. Singer. (In Economic Journal, London, April 1944, pp. 62–74. 7s. 6d.)

One of a series of articles by this writer on Germany's wartime economic administration and policies, begun in the Economic Journal for December 1940. This article includes an analysis of new methods of rationalizing production, and separate sections dealing with manpower, wages policy, price control, and restriction of consumption.

*World economic development—effects on advanced industrial countries.* By Eugene Staley. Montreal, International Labour Office, 1944. 218 pp., charts. $1.25.

Economic development is defined as a combination of methods by which the capacity of a people to produce and hence to consume may be increased. It is a broader term than industrialization when the latter is used to emphasize manufacturing and other secondary production as compared with agricultural and other primary production. The author believes that the economic development of new areas brings both opportunities and dangers to existing industrial areas, but that it is possible, by cooperation and adaptation, to make the advantages far outweigh the disadvantages. The study outlines the national and international policies which, it is believed, will yield the greatest mutual benefit.

## *Health Insurance and Medical Care*

*Medical care in flux.* By Elizabeth Harris. (In Trained Nurse and Hospital Review, New York, February 1944, pp. 99–102. 20 cents.)

Reviews attempts to provide medical care under group-practice plans in the United States, and describes the operation and benefits of Group Health Cooperative, Inc., New York City.

*Medical insurance.* By Frank P. Huddle. Washington, Editorial Research Reports (1013 Thirteenth Street NW.), 1944. 14 pp. (Vol. 1, 1944, No. 4.) $1.

The pamphlet deals with British health-insurance experience, and with problems of medical service and proposals for national health insurance in the United States.

*The effect of health insurance on the demand for health services.* By L. Richter. (In Canadian Journal of Economics and Political Science, Toronto, May 1944, pp. 179–205; charts. Also reprinted.)

A study of the level of demand for health services among a group of families covered by the private health-insurance scheme for mine workers and their families in the Cape Breton coal region of Nova Scotia, and in a similar group without such protection in the town of Yarmouth, Nova Scotia. The survey was made with a view to determining the extent of the demand which might be expected under a national system of health insurance in Canada.

*Health insurance.* By Ian A. Mackenzie. (In Canadian Journal of Public Health, Toronto, June 1944, pp. 213–233. 35 cents.)

Discussion by the Canadian Minister of Pensions and National Health of the health situation in Canada and the national health-insurance bill.

*El seguro de enfermedad en la Caja de Seguro Obligatario, [Chile].* By Hermes Ahumada P. (In Previsión Social, Ministerio de Salubridad, Previsión y Asistencia Social, Santiago, July–August–September 1943, pp. 327–340.)

Report of the preventive-medicine services of the Chilean Compulsory Insurance Fund for 1942, covering medical examinations, medical and pharmaceutical benefits, maternity aid, hospitalization, and administration of the medical services.

## *Housing*

*Tenth annual report of the Federal Housing Administration, for the year ending December 31, 1943.* Washington 25, 1944. [Various paging; mimeographed.

*Report of the Acting State Commissioner of Housing to the Governor and the Legislature of the State of New York.* Albany, Executive Department, Division of Housing, 1944. 51 pp., pasters, illus. (Legislative document, 1944, No. 47.)

*The St. Mark's neighborhood, [New York City]: A study of housing and general property conditions in a congested urban area.* New York, Community Service Society, Committee on Housing, 1943. 50 pp., maps; mimeographed. 50 cents.

*Workers' housing in Puerto Rico.* By Jacob Crane, U. S. National Housing Agency. (In International Labor Review, Montreal, June 1944, pp. 608–629. 50 cents.)

Describes the traditional pattern of housing in Puerto Rico and various attempts by the local government and, more recently, by the Federal Government of the United States, to deal with the problem. Future housing needs are outlined and suggestions are made for expanding construction activities.

*Building societies and the housing problem.* By G. D. H. Cole. London, J. M. Dent & Sons, Ltd., 1943. 31 pp. (Design for Britain, second series, No. 28.) 6d. net.

A criticism of the building-society movement, which the author states can have no assured future except by turning into a public institution for collecting small and medium savings, and using the capital thus collected for construction under public auspices.

## *Industrial Accidents and Accident Prevention*

*Industrial ophthalmology.* By Hedwig S. Kuhn, M. D. St. Louis, Mo., C. V. Mosby Co., 1944. 294 pp., charts, illus. $6.50.

Subjects covered in this volume include visual testing in industry from the standpoint of the visual requirements of individual jobs, the correction of visual defects for the job, and types of visual skills. There is a chapter on industrial eye injuries caused by solid bodies, and a discussion of eye protection and of the different factors entering into the provision of goggles to fit the visual standards of each job in which their use is necessary.

*1942 annual accident report, [Pennsylvania]: Part I, All reported injuries; Part II, Compensable injuries in Pennsylvania industries; Part III, Injuries to women in Pennsylvania industries.* Harrisburg, Department of Labor and Industry, 1943. 92, 43, and 29 pp.; mimeographed.

*Metal- and nonmetal-mine accidents in the United States during the calendar year 1941 (excluding coal mines).* By W. W. Adams and F. J. Kennedy. Washington 25, U. S. Department of the Interior, Bureau of Mines, 1944. 53 pp. (Bull. No. 457.) 15 cents, Superintendent of Documents, Washington 25.

*The national fire codes for flammable liquids, gases, chemicals, and explosives, 1943.* Compiled by Robert S. Moulton. Boston 10, Mass., National Fire Protection Association, [1943?]. 502 pp. $3.

*Safety subjects.* Washington 25, U. S. Department of Labor, Division of Labor Standards, 1944. 152 pp. (Bull. No. 67.) 20 cents, Superintendent of Documents, Washington 25.

Prepared for use as a standard training text on industrial accident prevention.

## *Industrial Hygiene*

*Industry and tuberculosis—viewpoints of management and labor.* By Leverett D. Bristol, M. D., and Matthew Woll. New York 19, National Tuberculosis Association, 1944. 20 pp.

The first of the two papers in this pamphlet discusses the problem of tuberculosis among industrial or occupational groups and among different age and racial groups, and the progress which has been made in combatting the disease. The second paper deals with the problem from the standpoint of labor.

*Neoprene (GR–M): Safeguarding workers handling synthetic rubber in the rubber industry.* Washington 25, U. S. Department of Labor, Division of Labor Standards, 1944. 45 pp., diagrams, illus. (Rubber series No. 1.) 10 cents, Superintendent of Documents, Washington 25.

*Occupational lead exposure and lead poisoning.* Report prepared by Committee on Lead Poisoning, Industrial Hygiene Section, American Public Health Association. New York 19, American Public Health Association, 1943. 67 pp., bibliography. 75 cents.

Recognition of hazardous industrial lead exposure, safe limits and control of occupational lead exposure, and diagnosis and treatment of lead poisoning are covered.

*The problem of industrial noise.* By Paul E. Sabine. (In American Journal of Public Health, New York 19, March 1944, pp. 265–270. 50 cents.)

Cites data from various published sources showing the physical effects of noise on workers, and suggests various measures for combatting this health hazard in industrial plants.

*Protecting plant manpower through the control of air contaminants.* Washington 25, U. S. Department of Labor, Division of Labor Standards, 1944. 28 pp. (Special bull. No. 14.) 10 cents, Superintendent of Documents, Washington 25.

## *Industrial Relations*

*Collective bargaining developments and representative union agreements.* New York 17, National Industrial Conference Board, Inc., 1944. 84 pp., charts. (Studies in personnel policy, No. 60.)

*Effect of elimination of unfair labor practices on extent of collective bargaining.* By Emily Clark Brown. Washington 25, U. S. Bureau of Labor Statistics, 1944. 12 pp. (Serial No. R. 1654; reprinted from Monthly Labor Review, June 1944.) Free.

*Union agreements in the leather-tanning industry, 1943.* Washington 25, U. S. Bureau of Labor Statistics, 1944. 19 pp. (Bull. No. 777.) 10 cents, Superintendent of Documents, Washington 25.

*The settlement of industrial disputes.* By Kurt Braun. Philadelphia, Blakiston Co., 1944. 306 pp. $3.50.

The author describes the main types of measures for settling disputes—mediation, conciliation, arbitration, and labor courts. Much of the volume is devoted to developments in Germany before the seizure of power by the Nazis.

*Works councils and committees.* London, S. W. 1, Industrial Welfare Society, 1943. 32 pp.

Discusses the functions, composition, and operation of works councils.

## *International Labor and Social Conditions*

*Constitutional provisions concerning social and economic policy: An international collection of texts covering 450 countries and other governmental units.* Montreal, International Labor Office, 1944. lix, 755 pp. $5.

*Declaration, recommendations, and resolutions adopted by the International Labor Conference at its 26th session, [Philadelphia, May 1944].* Montreal, International Labor Office, 1944. 121 pp. (Official Bulletin, Vol. XXVI, No. 1.) 50 cents.

*The twenty-sixth session of the International Labor Conference, Philadelphia, April–May 1944.* (In International Labor Review, Montreal, July 1944, pp. 1–37. Reprints of article are available at 10 cents.)

General summary of the work of the conference.

*What the workers expect of the International Labor Organization.* By Bernardo Ibañez. New York 17, American Labor Conference on International Affairs, 1944. 18 pp. (Pamphlet No. 1.) 10 cents.

*International labor and post-war reconstruction.* By Lewis L. Lorwin. (In World Economics, Washington 16, March-June 1944, pp. 3–33. $1.)

Outlines developments in the field of international organizations after 1914, reviews the difficulties encountered by the international labor movement during the war, and describes distinctive characteristics of labor organizations in major areas of the world. Consideration is also given to the possible basis of unifying organizations and harmonizing aims for post-war action.

## *Labor and Social Legislation*

*Cases and materials on labor law.* By Milton Handler. St. Paul, Minn., West Publishing Co., 1944. 786 pp. (American casebook series.) $6.

Casebook on labor law in the United States with emphasis upon contemporary statutes and practices. The volume is intended as a textbook, and deals with the objects of labor combinations, and the means by which labor, through concerted action, seeks to attain its ends.

*Court decisions on teacher tenure reported in 1943.* Washington 6, National Education Association of the United States, Committee on Tenure, 1944. 27 pp. 25 cents.

A "Subjectmatter index of court decisions on teacher tenure, 1933–1942" was also published recently by the National Education Association (25 cents).

*Apreciações sobre a consolidação das leis do trabalho, em sua aplicação na indústria e no comércio, [Brazil].* By Rubens Maragliano. (In Legislação do Trabalho, São Paulo, September 1943, pp. 333–342.)

Shows the changes that the 1943 consolidation of labor laws made in existing Brazilian labor legislation, and lists temporary or emergency labor and related legislation, through September 16, 1943, left in force by the consolidation.

*The Factories Act, [Great Britain], 1937.* By H. Samuels. London, Stevens & Sons, Ltd., 1943. 622 pp. 3d ed. 37s. 6d.

Covers the history of factory legislation in Great Britain, compares present and past regulation, and gives the text of the 1937 law and labor legislation bearing upon it.

*Federalism and labor legislation in India.* By Sir Atul C. Chatterjee. (In International Labor Review, Montreal, April–May 1944, pp. 414–445. Reprints of article are available at 10 cents each.)

Review of the problems involved in the distribution of legislative authority in India with respect to labor and social questions.

*Dos años de actuación al frente del Ministerio de Trabajo, mayo 1941–1943, [Spain].* Madrid, [Ministerio de Trabajo, 1943]. 206 pp.

Lists by topic the labor and social legislation enacted in Spain from May 1941 through May 1943, analyzes some of the principal provisions of this legislation, and gives statistics on operation of certain of the laws.

## *Labor Organizations*

*Tailor's progress: The story of a famous union and the men who made it.* By Benjamin Stolberg. New York, Doubleday, Doran, & Co., Inc., 1944. 360 pp. $2.75.

This colorful biography of the International Ladies' Garment Workers' Union throws new light on the politics, problems, and personalities that have figured prominently in the American labor movement in the past 50 years. It also reflects the growth of the women's garment industry from its sweatshop days to its present position as one of America's leading industries.

*The Canadian Congress of Labor—proceedings of the fourth annual convention, Montreal, Quebec, September 15–19, 1943.* Ottawa, Ont., Canadian Congress of Labor, [1944?]. 178 pp.

*The Dutch working-class movement during the German occupation.* By Meyer Sluyser. (In International Postwar Problems, American Labor Conference on International Affairs, New York 17, June 1944, pp. 387–395. $1.)

*The French trade-union movement since the armistice of 1940.* By Paul Vignaux. (In International Postwar Problems, American Labor Conference on International Affairs, New York 17, June 1944, pp. 341–352. $1.)

## *Manpower*

*Facts about the priority referral program.* Washington 25, U. S. War Manpower Commission, Information Service, June 5, 1944. 12 pp.; processed.

*The labor force in wartime America.* By Clarence D. Long. New York, National Bureau of Economic Research, Inc., 1944. 73 pp., charts. (Our economy in war, Occasional paper 14.) 50 cents.

The author discusses the development of the "labor-force" idea, as supplementing the older "gainful occupations" concept, and the factors affecting the number of persons in the labor force. These are described as changes in the age and sex distribution of the population and fluctuations in the propensity to be in the labor force. An attempt was made to trace the changes in the labor force during the first World War as well as during the present war. Experiences in Great Britain and Germany in expanding the labor force are compared with experiences in the United States.

*Labor requirements for selected farm enterprises in Washington.* By Carl F. Reuss, Arthur W. Peterson, Mark T. Buchanan. Pullman, State College of Washington, Agricultural Experiment Station, 1943. 24 pp., charts. (Bull. No. 432.)

The labor requirements per unit of work or output in different kinds of farm production are charted for varying volumes of production. Thus, the man-hours of labor per head required for regular chores in cattle feeding were found to decline rapidly as the number of feeder cattle increased, up to about 20, the reduction in labor requirements per head being comparatively slight with further increases in the number of feeder cattle. The study has a bearing on the most efficient utilization of manpower and also on the problem of the family-size farm versus the large commercial farm.

## *Personnel Management*

*Constructive discipline in industry: A study of current practices and trends in maintaining orderly relationships between management and men.* New York 18, American Management Association, 1943. 36 pp. (Special research report No. 3.)

*Employee counseling—a selected list of references.* Washington 25, U. S. Civil Service Commission, Library, March 1944. 9 pp;. processed. Free.

*The exit interview.* Washington 25, U. S. Office of Defense Transportation, 1944. 9 pp.; mimeographed. Free.

*Music in industry: A manual on music for work and for recreation in business and industry.* Chicago, Industrial Recreation Association, 1944. 63 pp., bibliography, illus.

Tells how to set up and operate a plant music-broadcasting system, and gives information on types of service, costs, and effects of use of music on worker morale, production, etc. There is also a chapter on how to organize and develop employee musical activities.

*Orienting the new worker.* New York 10, Metropolitan Life Insurance Co., Policyholders Service Bureau, [1944?]. 60 pp., illus.

The report discusses the methods followed by various companies in acquainting new workers with their duties, working conditions, and other features of their employment, which will assist in the development of good morale among employees.

*An introduction to industrial psychology.* By May Smith. London, Cassell & Co., Ltd., 1943. 264 pp. 7s. 6d.

Subjects covered include fatigue in industry; the environment—general, material, and psychological; finding the right person for the right job; time and motion study; and temperaments.

## *Post-War Reconstruction*

*As we win.* CIO post-war planning committee report No. 1 on reconversion and demobilization. Washington 6, Congress of Industrial Organizations, Publicity Department, 1944. 31 pp. (CIO publication No. 98.) 5 cents.

*Beyond victory.* By Jerry Voorhis. New York, Farrar & Rinehart, Inc., 1944. 240 pp. $2.50.

The author expresses the view that Government, by means of monetary and fiscal measures, can maintain employment and economic activity in private fields without providing direct employment to such an extent as to narrow unduly the area of private business.

*Impact of the war on the Waco-McGregor area, McLennan County, Texas: Working notebook for use by local groups studying recent economic developments and formulating plans for the post-war period.* Washington 25, U. S. Bureau of Labor Statistics, 1944. 49 pp., maps, charts; mimeographed. (Industrial area study No. 14.) Free.

Another study recently issued in this series dealt with the Muscle Shoals area, Alabama (Industrial area study No. 13).

*Post-war economic policy and planning: The problem of post-war employment and the role of Congress in solving it.* Report of the Special Senate Committee on Post-War Economic Policy and Planning pursuant to S. Res. 102. . . Washington 25, 1944. 11 pp. (Senate report No. 539, part 4, 78th Cong., 2d sess.)

*Post-war planning now: 286 selected post-war digests of factual industry plans.* New York 15, Journal of Commerce Corporation, 1944. 24 pp. (Second edition—spring 1944.)

*Post-war planning.* By John E. Armstrong and others. Montreal, Engineering Institute of Canada, 1944. 11 pp.

Estimates of post-war Canadian full employment and discussion of what industry and the Government can do to implement it.

*The treatment of post-war Germany.* Edited by R. Flenly. Toronto, Ryerson Press, 1943. 67 pp. (Contemporary affairs, No. 18.) 50 cents.

The papers presented in this booklet deal with post-war political settlement, reeducation, and the economic problem. The paper on the latter subject includes a plan for a "realistic peace."

## *Social Security*

*Community health and welfare expenditures in wartime, 1942 and 1940—30 urban areas.* By Edward E. Schwartz and Eloise R. Sherman. Washington 25, U. S. Department of Labor, Children's Bureau, 1944. 70 pp., charts. (Bureau publication No. 302.) 20 cents, Superintendent of Documents, Washington 25.

*Joint statement on social security, by the agriculture, business, and labor committees on national policy of the National Planning Association.* Washington, National Planning Association, 1944. 36 pp. (Planning pamphlet No. 33.) 25 cents.

The recommendations of the joint committee of the Association include extensions of the coverage and the benefits of the Social Security Act; development of sickness and disability insurance; Federal grants-in-aid to public assistance programs by a formula which would inversely reflect the relative wealth of the States; administration of social-security programs on a national basis but with decentralized day-to-day administration; and development of representative advisory bodies, national and local, to insure more democracy in social security. There are discussions also of the cost of financing the proposals, of war emergency measures, and of problems calling for further study.

*Actas de la Primera Conferencia Interamericana de Seguridad Social realizada del 10 al 16 de septiembre de 1942, Santiago de Chile.* Santiago, Cervantes (printer), [1942]. 353 pp.

Proceedings of the First Inter-American Conference on Social Security, held at Santiago, Chile, September 10 to 16, 1942.

*Informe que presenta el gerente de la Caja del Seguro al consejo de administración, acerca de las labores desarrolladas en el año 1942, [Ecuador].* Quito, Caja del Seguro, [1943]. 104 pp.

Report on operation of the Ecuadoran insurance fund for working persons in 1942, with comparative statistics for earlier years, including data on membership, medical aid, retirement and survivors' benefits, and the financial status of the fund. There is also a comparison of the original social-insurance law of Ecuador with the one now in effect.

*The Beveridge plan—a symposium.* By James W. Nisbet, Sir Arnold Gridley, Sir Ernest J. P. Benn. London, Society of Individualists, 1943. 55 pp. (Post-war questions, No. 24.) 6d.

Titles of the three contributions in this pamphlet, all of which are critical of the Beveridge plan, are: Britain and social security—an appraisal of the Beveridge plan; Deceiving the people; and Some implications of the Beveridge report.

*Order by His Majesty concerning retired pay, pensions and other grants for members of the air forces and of the nursing and auxiliary services thereof disabled, and for the widows, children, parents, and other dependents of such members deceased, in consequence of service during the present war.* London, Ministry of Pensions, 1944. 42 pp. 9d. net.

## *Wage-Payment Methods*

*Developments in wage-payment techniques.* By Carroll R. Daugherty, John W. Riegel, P. W. Jones. New York 18, American Management Association, 1944. 30 pp. (Personnel series No. 77.)

The experience of the National War Labor Board with incentive wage plans is noted; the general nature of incentive compensation, arguments favoring it, and conditions affecting its success are discussed; and methods are outlined for promoting job-evaluation procedures.

*Practical uses of wage incentives.* By Phil Carroll, Jr., and others. New York, American Management Association, 1944. 31 pp. (Production series No. 150.)

Collection of papers presented at the autumn production conference of the American Management Association. The first paper advocates incentive wages. The second paper describes the National War Labor Board's policy as preventing incentive plans from circumventing the wage-stabilization program and as requiring joint labor-management approval before adoption of any plan can be ordered. Another paper discusses the trends in incentive compensation, and a final paper describes the Grumman Aircraft plan.

*Wage incentive in wartime.* New York, Consolidated Management Consultants, 1944. 48 pp., diagrams. Free.

Emphasizes the importance of union-management agreement on incentive plans and procedures and the value of a statement of plans in terms that workers can readily understand.

*Wage incentives: Will they increase war production?* By Victor V. Veysey. (In Engineering and Science Monthly, California Institute of Technology, Pasadena, January 1944; 5 pp., illus. Also reprinted.)

The author believes that there is need for the development of incentive principles in industry, but states that incentives can be developed through a well-administered hourly-wage structure or through the proper use of non-financial incentives. Wage-incentive plans are described as dependent upon conditions of careful standardization of the work and the setting of proper and fair standards of performance.

## *Wages and Hours of Labor*

*Hourly entrance rates of common laborers in large cities, spring and summer of 1943.* Washington 25, U. S. Bureau of Labor Statistics, 1944. 12 pp. (Bull. No. 775; reprinted from Monthly Labor Review, April 1944.) 5 cents, Superintendent of Documents, Washington 25.

*Union wages and hours in the baking industry, July 1, 1943.* Washington 25, U. S. Bureau of Labor Statistics, 1944. 62 pp., chart. (Bull. No. 778; reprinted from Monthly Labor Review, March 1944, with additional data.) 10 cents, Superintendent of Documents, Washington 25.

*Union wages and hours of motortruck drivers and helpers, July 1, 1943.* Washington 25, U. S. Bureau of Labor Statistics, 1944. 38 pp., chart. (Bull. No. 771; reprinted from Monthly Labor Review, February 1944, with additional data.) 10 cents, Superintendent of Documents, Washington 25.

*Earnings and hours in rayon-producing industry, [1936–44].* By Ethel B. Dunn. (In Conference Board Management Record, National Industrial Conference Board, Inc., New York, May 1944, pp. 124–126.)

A new series replacing the National Industrial Conference Board's series for rayon and allied products for the period beginning in January 1936.

*Schedule of wages for civil employees in the field service of the Navy Department, the Marine Corps, and the Coast Guard within the continental limits of the United States, revised to November 30, 1943.* Washington 25, U. S. Navy Department, Wage Administration Branch, Division of Personnel Supervision and Management, 1944. 41 pp.

*Salaries paid police officers in various Virginia towns.* Richmond, League of Virginia Municipalities, April 1944. 5 pp. (Report No. 277.) 25 cents (free to Virginia municipal officers).

*Wages and labor costs.* By Richard A. Lester. (In Southern Economic Journal, Chapel Hill, N. C., January 1944, pp. 235–238. $1.)

The author analyzes data developed by the U. S. Bureau of Labor Statistics on average hourly earnings and unit labor cost in manufacturing.

*The wage-rate index-number.* By A. L. Bowley. (In London & Cambridge Economic Service, Cambridge, England, January 1944, pp. 6–8.)

Summary statement explaining the London and Cambridge Economic Service's index of British wage rates, described as an index of average weekly wage rates as distinguished from average earnings. The index in its present form was initiated in 1929 and worked back to a 1924 base. It superseded an earlier and less comprehensive index based on 1914.

## *Women in Industry*

*Equal pay—a progress report.* Washington 25, U. S. Department of Labor, Women's Bureau, May 1944. 4 pp. Free.

Outlines the progress made since World War I, particularly since the beginning of the national defense program in 1940, in attainment of equal pay for women doing the same work as men.

*A preview as to women workers in transition from war to peace.* By Mary Elizabeth Pidgeon. Washington, 25, U. S. Department of Labor, Women's Bureau, 1944. 26 pp. (Special bull. No. 18.) 10 cents, Superintendent of Documents, Washington 25.

The four parts of this publication deal, respectively, with the change to peacetime life, factors affecting women's opportunities, factors in the general economic background, and planning for women.

*Womanpower, a selected list of references published in 1943.* Compiled by Idair Smookler. Washington 25, U. S. Office for Emergency Management, Library, January 1944. 13 pp.; processed. Free.

*Women's employment in foundries, 1943.* By Frances E. P. Harnish. Washington 25, U. S. Department of Labor, Women's Bureau, 1944. 28 pp. (Bull. No. 192–7.) 10 cents, Superintendent of Documents, Washington 25.

*Women's wages on men's jobs, [New York State].* Albany, New York State Department of Labor, Division of Women in Industry and Minimum Wage, 1944. 33 pp.; processed.

*Women in Nazi Germany.* By Katherine Thomas. London, Victor Gollancz, Ltd., 1943. 102 pp. 3s. 6d.

Gives some data on women's industrial employment in wartime.

*Mainly for men.* By Ethel M. Wood. London, Victor Gollancz, Ltd., 1943. 126 pp. 3s.

A report and protest concerning the restrictions on women's opportunities in Great Britain in the civil service, in industry, on the land, in education, in police work, and in the home.

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